PROGRESSIVE EARLY-YEARS APPROACHES AND THE DISADVANTAGED LEARNER – THE CASE OF THE WELSH FOUNDATION PHASE

This thesis is submitted in partial fulfilment of the requirements for the degree of PhD.

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Summary

Research increasingly shows early-years education can have positive impacts on longer-term outcomes, especially for children from socio-economically disadvantaged backgrounds. However, the impact of large-scale curriculum reforms is not well understood. Embedded within international debates on educational approaches, this study addresses a gap in empirical knowledge by investigating the impact of a progressive, statutory, curriculum reform - the Foundation Phase (FP) - introduced across Wales with an aim of improving children's life chances, especially those from disadvantaged backgrounds. It both examines the extent to which the FP has impacted attainment in the early-years and mitigated the impact of poverty on pupil outcomes, and how it is enacted and perceived by practitioners, particularly in relation to these learners.

A three-phased sequential mixed methods approach was adopted. Phase One drew on a statistical analysis of administrative attainment data for all Year 2 pupils over a six-year period; Phase Two on a national survey of FP Lead Practitioners; and Phase Three on an analysis of data derived from semi-structured case study teacher interviews. Data from an earlier evaluation of the FP was also used to make comparisons over time.

The findings exposed an important contradiction: despite improvements in overall attainment and reduced poverty-based gaps at lower levels, progress towards mitigating poverty's impact on higher levels of attainment was limited. However, an increasing proportion of teachers felt that learners from disadvantaged backgrounds especially benefited from the programme. This needed elucidation. Subsequently, the research raised concerns about how attainment in the early-years is understood and measured, how this impacts practice, and that under current funding arrangements, tensions particularly unique to schools in disadvantaged areas, may limit teacher and pupil capacity to engage with the curriculum's design. Important implications for equity and social justice are identified for consideration in the implementation of similar curricula in schools in disadvantaged areas and the new national curriculum in Wales.

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Acronyms

BERA	British Educational Research Association
DAP	Developmentally Appropriate Practice
DCELLS	Department for Children, Education, Life Learning and Skills
eFSM	Eligible for free school meals
Estyn	Office of His Majesty's Chief Inspector of Education and Training in Wales
FP	Foundation Phase
FPL	Foundation Phase Lead
FSM	Free school meals
KS1	Key Stage One, the curriculum that the Foundation Phase replaced.
KS2	Key Stage Two, the curriculum for seven-eleven year olds after the Foundation
	Phase.
LLC	Language, Literacy and Communication
LNF	Literacy and Numeracy Framework
MDT	Mathematical Development
NAfW	National Assembly for Wales
05+	Outcome 5 or higher (expected level of achievement for six-seven year olds)
06+	Outcome 6 or higher (expected level of achievement for seven-eight year olds)
OECD	Organisation for Economic Co-operation and Development
PLASC	Pupil Level Annual Schools Census
PDG	Pupil Deprivation Grant
PSD	Personal and Social Development, Well-being and Cultural Diversity
SEN	Special Educational Needs
T ₁	Time 1 (combined cohorts in the years 2011/12 to 2013/14)
T ₂	Time 2 (combined cohorts in the years 2014/15 to 2016/17)
ТА	Teaching/Classroom Assistant

Glossary of Key Terms

Adult-directed	Adults direct children's learning activities, usually during Focused
	Provision.
Child-initiated	Pupils choose the area they want to work in and what they are
	going to do there.
Continuous provision	Resources in the learning environment (ideally indoors and
	outdoors) that are always available for children to access
	independently, such as role-play, construction, reading and
	creative development.
Enhanced Provision	Additional challenges or tasks within the learning environment
	which match children's interests or the current topic of learning.
Focused Provision/	Where adults teach specific skills, knowledge, and concepts,
Tasks	either through whole-class teaching, group work or alongside
	individuals.
Enactment	Interpretation and translation of the planned curriculum into
	classroom practice.
Pedagogy	The means by which the curriculum is enacted including the
	method and practice of teaching
Recontextualise	Imagine, interpret, contextualise, and translate the curriculum
	into classroom practice.
Regional Consortia	Organisations that work with schools to raise standards and
	provide a range of support, including professional development,
	to improve education in their regions.
Please see Estyn (2017) for further information related to desired pedagogical practice in	
the Foundation Phase.	

Chapter One: Introduction to the Thesis

1.1 Introduction

Poverty and education are inextricably linked and the related inequities in educational outcomes are a perennial challenge. Low achievement in school can have lasting impacts on longer-term health, economic prospects, and general life chances, which makes it difficult to break the poverty cycle and improve social mobility. To ensure that compulsory education doesn't contribute, it's important to understand how education reforms impact the outcomes of different groups of learners and ensure they do not exacerbate inequalities between them. This is the context of my research.

Governments around the world have long made instrumental decisions about the key purpose and goals of education, the desirable outcomes of compulsory schooling, and social justice. However, what social justice means in terms of educational purpose and content, or modes of organisation and delivery is not, it seems, straightforward (Francis et al., 2017). Sadly, despite decades of reform to compulsory education, outcome inequalities remain. More recently however, there has been a surge of interest, investment, and intervention into provision for the early-years because a growing body of research indicates that early education can positively impact long term outcomes. Furthermore, studies suggest that benefits are particularly apparent for learners from socio-economically disadvantaged backgrounds and could lead to improvements in their longer-term prospects. This is important, since if early educational provision can reduce gaps between learners that otherwise continue to grow throughout childhood, stubborn longer-term disparities associated with socio-economic disadvantage could be narrowed. However, there is a lack of consensus over the most appropriate goals and approaches for the early-years and the empirical evidence base on the efficacy of different types of national curricula is thin.

The research conducted for this thesis attempts to contribute to the field by examining the differential impact of a child-centred, play-based early-years national curriculum in Wales – the Foundation Phase - over time. To this end, it aims to contribute to the body of understanding regarding the potential of these popular types of early-years curricula for

pupils from disadvantaged backgrounds and their ability to narrow achievement gaps when implemented at scale. The rest of this chapter offers an introduction to the context of the thesis including its rationale, aims and objectives and the specific policy context of the empirical research. It is organised into five further sections, beginning with the contextual background to the research. This section highlights the importance of the topic, the research problem, and the need for the study. The following section then describes the research aims, objectives, questions, methodological approach, scope, and contribution of the research. An introduction to the education and early-years policy context in Wales is then offered, providing the background to the reform this research evaluates. Finally, the chapter closes by outlining the structure of the rest of the thesis.

1.2 Contextual background

Paradoxically, education is regularly positioned as a route out of poverty, but research demonstrates that students from poorer backgrounds consistently underachieve (Raffo et al., 2010). Indeed, one of the most well-established findings of education research is that poverty and school attainment are linked, and this appears to be a global phenomenon (Gorard, 2018; Raffo et al., 2010). Moreover, in the UK, a child's socio-economic background remains the strongest predictor of educational attainment (Francis et al., 2017). As the long-term impacts of low educational attainment are well-established, there is widespread consensus over the importance of equity in educational opportunity and outcomes, epitomised by national, European, and global goals which include reducing gaps between learners (e.g., see OECD, 2023). However, the focus of this thesis stems from the continued persistence of poverty-related attainment gaps in the face of decades of concern and policy action. Despite sustained policy effort to support disadvantaged learners in the UK, recent research suggests there has been little change in the 'disadvantage gap' in GCSE attainment over the past 20 years, and that pupils who are eligible for free school meals are around three times less likely to achieve above the expected level at age eleven, at GCSE, or to attend one of the most selective higher education institutions than their more advantaged peers (Farquharson et al., 2022). This is staggering. While there is widespread agreement that every child has a right to the opportunity to develop to their full potential, this does not appear to match reality for many (Cattan et al, 2022). While countries have advocated a range of policies and

intervention strategies to address this, evidence suggests that interventions have, in large measure, failed to deliver systemic change and greater equity in terms of educational outcomes (Raffo et al., 2010).

Millions of children from disadvantaged backgrounds start school on the back foot: developmental disparities emerge early in childhood and discrepancies relate to both cognitive and socio-emotional skills. Furthermore, the gap between children from impoverished backgrounds and their peers continues to grow throughout schooling (Gorard, 2018). By as young as seven, socioeconomic gaps on standardised assessments have been found to predict later academic performance, which suggests that foundations for low attainment can become fixed during these earlier years (Goodman and Burton, 2012). Indeed, international research suggests that by the age of five, disadvantaged children are already behind their more advantaged peers by 12 months of development (OECD, 2020), while in the UK, evidence suggests the average gap in vocabulary is as much as 15 months (Finnegan & Warren, 2015). Rather worryingly, it is argued that the foundations of poor academic attainment and economic, physical, and mental well-being are laid in the first five years of a child's life (Willms, 2015). However, it is widely believed that reducing gaps in the preschool years through early intervention may help narrow later attainment differences (Magnuson et al., 2016; Ofsted, 2014). It is argued for instance that even where programmes are universal, early intervention to address gaps in cognitive development can prevent children from falling behind and spending the rest of their education constantly trying to 'catch up' (Wyse et al., 2018). Research has demonstrated that early education provision can have beneficial and long-term impacts on pupil outcomes (e.g., see McCoy et al., 2017; Sylva et al., 2004, 2014) and there is evidence to suggest that returns from interventions during this period can be greater than those later-on and that disadvantaged children may benefit most (Burger, 2010; Heckman et al., 2013; OECD, 2020; Siraj-Blatchford et al., 2002). The notion that an early-years curriculum may help mitigate poverty's impact on outcomes thus is an exciting one and is especially worthy of attention.

While substantial consensus exists about the value of early education, this does not appear to extend to curricula detail, especially when it comes to systemwide statutory programmes and learners from disadvantaged backgrounds. Here, the nature and purpose of education (which

in this thesis includes the education of three to seven year olds) remains highly contested with debates concerning what type of curriculum and approach is the most appropriate for young children. Despite increased research attention on the early-years, there is little agreement over which approach is the most effective. That said, child-centred, play-based curricula are popular, particularly with those who see a focus on conventional instruction and attainment as inappropriate for young children and a broader range of 'softer' outcomes more important. However, there is a dearth of empirical research on the efficacy of such approaches for different learners when implemented at scale. Indeed, even the widely celebrated child-centred early-years programmes in New Zealand and Reggio-Emilia lack empirical evidence supporting their efficacy on educational outcomes, as the next chapter shows.

Despite this, it is often argued that the centring of these types of curricula on children's interests and experiences leads to greater engagement and motivation to learn, which are framed as precursors to improved outcomes. Furthermore, some believe these curricula are particularly important for learners from disadvantaged backgrounds who may feel alienated by more traditional approaches (e.g., see Hayes et al., 2006). However, while sometimes framed as having the potential to mitigate the impact of poverty on educational outcomes, there is also some theoretical and empirical argument that they may not benefit all learners and, moreover, that pupils from disadvantaged backgrounds may gain less than their peers (Bernstein, 1977, 2000; Power et al., 2019). Indeed, the largest evaluation of an early-years child-centred, play-based reform raised a number of serious concerns in this regard (Taylor et al., 2015, 2016b), which is concerning given the lack of empirical data on and popularity of these types of approaches.

While what constitutes quality and equity in education is contested (Mutch, 2013), resolving these debates seems especially important if we are hoping to address educational inequalities early on. Indeed, Francis et al., argue that these debates should be informed by 'the provision and evaluation of rigorous research evidence, both qualitative and quantitative, including longitudinal work tracking the impact of different policy approaches on student experiences and educational outcomes' (2017, p.427). Furthermore, in order to understand the impact of a child-centred, play-based reform on pupil outcomes, it is

necessary to consider both the resulting pupil outcomes *and* the way in which the reform is understood and enacted by practitioners. Otherwise, one cannot determine how any observed impact on pupil outcomes actually relates to how the curriculum is enacted. This is because research has highlighted significant gaps between the curriculum as conceptualised and the curriculum as practiced (Power et al., 2019). However, as the next chapter shows, the focus of research on the celebrated child-centred approaches largely focuses on how they are enacted. While this might be helpful for the many educators across the globe inspired by them, it is important to understand how their enactment impacts outcomes for different learners before further attempts are made to transport them. This seems to require a two-pronged approach.

The lack of empirical research on the efficacy of these programmes suggests that the expected social or academic benefits featured in educational rhetoric and policy documentation are not based on large-scale empirical evidence. This means that we do not know a) how learners from disadvantaged backgrounds benefit compared to their peers and therefore b) what the likelihood of narrowing poverty-related gaps in pupil outcomes might be. The lack of this kind of evidence seems to stem from a number of tensions, one of which is a lack of routinely measured and collected outcome data which is often seen as antithetical to the progressive leanings of these early-years approaches.

This is where the research conducted for this thesis has a particular advantage. This study is able to exploit a rather unique situation for a broadly progressive, child-centred early-years curriculum because outcome data *is* available for interrogation. The Foundation Phase (FP) curriculum in Wales is a systemwide educational reform based on the child-centred, progressive practices of New Zealand, Reggio Emilia, and Scandinavia. However, the advantage here is that educational outcome data for all seven-year-olds is collected in Wales, which means that the curriculum's impact on pupil outcomes can be studied on a large scale. Not only that, but this research is also able to discern the outcomes of pupils associated with socio-economic disadvantage. This means that the differential impacts of the programme can be investigated, enabling some empirical insight into the effects of child-centred, play-based curricula. Furthermore, the study benefits from the availability of baseline data on the way the curriculum was initially enacted in a number of case study schools. As the researcher has

access to this data, it means that changes in attainment over time and the way the curriculum is enacted can be jointly considered in an appraisal of the curriculum's impact. These advantages are thus incorporated into the study's aims, objectives, and research questions, outlined next.

1.3 Research aims, objectives, scope and contribution

This research aims to address the lack of empirical evidence on the efficacy of large-scale, child-centred, play-based programs for learners from disadvantaged backgrounds. It is hoped this will contribute to our understanding of how early education may serve these learners and impact the gaps between them and their peers that appear at an early age. To this end, the overarching aim of this thesis is to consider how early-years progressive reforms impact the outcomes of pupils from disadvantaged backgrounds. The research uses the FP in Wales as an example of an early-years reform and recognises the need to understand how the programme is understood and enacted by practitioners in order to evaluate its impact. This is reflected in the following two research objectives, which are designed to help achieve the study's overarching aim:

- To examine the extent to which the Foundation Phase has impacted attainment in the early-years and mitigated the impact of poverty on pupil outcomes.
- To examine how the Foundation Phase is enacted and perceived by practitioners, particularly in relation to children from disadvantaged backgrounds.

These objectives are broken down into a series of questions which the research seeks to answer and the rest of the thesis addresses:

- How has pupil attainment in the Foundation Phase changed between 2011/12 and 2016/17?
- 2. To what extent has the Foundation Phase mitigated the impact of poverty on pupil outcomes during this period?
- 3. How is enactment of the Foundation Phase related to measured outcomes during this period?
- 4. a) How do teacher interpretations of the Foundation Phase relate to attainment, other educational outcomes, and perceptions of equity?

b) How have they changed during the study period?

While the term 'disadvantaged' does not appear to have a single exact definition (Hannon et al., 2020), in this research, children from disadvantaged backgrounds are understood as children from families who are likely to experience disadvantaging circumstances related to poverty. These typically include low incomes and educational levels, poor or temporary housing, and greater ill health than others. This is aligned with other research in the field (e.g. see Gorard, 2018, Hannon et al., 2020). However, the interpretation of pupil outcomes associated with disadvantage in this study is more narrowly defined by eligibility for free school meals (FSM), which has been dictated by the way in which the administrative outcome data is collected. This again is a common approach and is discussed in further detail in the methodology chapter.

The research considers the education of children in Welsh primary schools up to the age of seven. It does not evaluate learning outcomes or experiences in earlier or later stages of the educational journey or in other contexts. It adopts a mixed methods approach, using quantitative outcome data collected in the final year of the FP and interview data from teachers in the FP (detailed in the methodology chapter). By adopting a mixed methods approach and using interviews in particular, the study is able to consider wider impacts of the programme than on measured attainment alone. This facilitates a broader understanding of how these curricula may impact the achievement of learners affected by poverty, in part addressing the concerns by some about attainment driven, reductive definitions of equity (e.g., see Lingard et al., 2014). Furthermore, the mixed method design also allows the enactment of the curriculum to be explored, which the research literature suggests is a particularly important consideration in any evaluation. Indeed, this approach responds to a call from others for greater engagement with data generation from the bottom up, including quantitative and rich qualitative data generated at a local school level (Martino & Rezai-Rashti, 2013). This is because, as Martino and Rezai-Rashti contend, '[s]uch data generation has the capacity to better account for the contextual specificity of schooling, as well as the influence of specific background characteristics and their effects for particular populations in specific school communities' (2013, p.607).

Using the example of the FP then, this research will contribute to the body of knowledge on the potential impact of play-based, child-centred early-years curricula, and address the existing lack of empirical data on the effects of these programmes when implemented at scale. Moreover, the study helps to address the current shortage of research on the differential impact of such curricula and their potential ability to narrow poverty-based gaps in pupil outcomes, at least in the short term. This is facilitated through the examination of pupil attainment outcomes and the perceptions of teachers enacting the programme, which furthers our understanding of some of the particular issues of enacting such programmes in schools serving areas of significant disadvantage. The study also offers some real-world value to educationalists in Wales, in the light of its new curriculum for 3–16-year-olds (CfW) which started roll-out in 2022. Because CfW has many similarities with the FP (Power et al., 2020), there are some important implications and lessons that can be drawn from the findings of this research concerning learners from disadvantaged backgrounds. It also has value for those within education systems in similar contexts outside of Wales. This includes policy makers and designers considering similar programmes, or those of existing ones who have not yet evaluated their efficacy in this way. It highlights some of the issues pertinent to the enactment of such curricula in schools in disadvantaged areas and the ways such programmes may impact learners affected by poverty. The next section summarises the backdrop to the specific curriculum that this research investigates, providing the contextual information to assist with interpreting the research findings.

1.4 Welsh education policy context

Following parliamentary devolution in Wales in 1999, the Welsh Government published *The Learning Country: A paving document* (NAfW, 2001), in which the origins of the FP can be found. This document represented Welsh Government's desire to reshape education as part of a national strategy to take its own direction and 'get the best for Wales' (Egan, 2017; Taylor et al., 2016b). The context for the FP itself included the persistent underachievement of approximately 20% of primary school children, a concern about formal approaches to teaching and learning in the early-years and the contribution these were having to underachievement, and a desire to introduce more developmentally appropriate practices into classrooms (see Taylor et al., 2016b). The resulting FP was one of the government's flagship policies and represented a radical departure from the previous more formal, competency based Key Stage 1 curriculum, with significant differences in both curriculum and pedagogy (Taylor et al., 2016b). It is a statutory continuous curriculum for all three– seven-year-olds in primary schools and non-maintained settings in Wales, modelled on a range of play-based, child-centred early-years approaches from abroad (see Maynard et al., 2013). While it is noted that there was no attempt to empirically 'test' the key components of the FP as they were being developed (Taylor et al., 2016b), a significant consultation process was undertaken (see NAfW, 2001, 2003). The programme was then piloted in 41 schools and non-maintained settings in 2004, and in 2008, it was rolled out to all schools Nationally. Finally, by 2012, the programme had been fully rolled out to all years in the FP.

During its inception, the main aims of the FP were to raise children's standards of achievement, enhance positive attitudes to learning; address developing needs; enable children to benefit from educational opportunities later in their lives; and help them become active citizens (NAfW, 2003, p.6). While reducing attainment gaps was a principle for action set out in The Learning Country (NAfW, 2001), there became a particular focus on and expectation of improving the outcomes for children from disadvantaged backgrounds and reducing achievement gaps between children based on socio-economic disadvantage in FP policy documentation (e.g. see Maynard et al., 2013; Welsh Government, 2016a). Indeed, in 2016, narrowing gaps between learners became a main priority in the FP (Welsh Government, 2016a) and a central goal of the country's wider 'national mission' (Welsh Government, 2017a).

The focus on the attainment of disadvantaged learners may in part be explained by the Welsh poverty context. In 2012 for example, estimates positioned one in three children as living in poverty and 14% in severe poverty, the highest rates in the UK (Chamberlain & Mullineux, 2012). The links between low achievement and socio-economic disadvantage were well known at this time, and in the same year, a Pupil Deprivation Grant was introduced¹ which provided additional funding to schools to use on evidence-based

¹*The pupil Deprivation Grant is based on the number of pupils eligible for Free School Meals (eFSM) or who are Looked After Children, and was renamed the Pupil Development Grant in 2017.*

interventions to help close the attainment gap (Pye et al., 2017). Still, in 2017, a report by the Bevan Foundation concluded that the major challenge facing the Welsh education system was poverty's impact on educational achievement and the slow progress being made to overcome it (Egan, 2017). This report indicated that 28% of children aged seven in receipt of free school meals did not meet expected levels in literacy and numeracy, and nearly 70% of 15-year-olds living in poverty did not achieve five GCSEs at C or above including English and Mathematics. It was around this time that the Welsh Government made improving the outcomes of children experiencing poverty one of the main priorities of the FP, in an attempt to address the problem early on (see Welsh Government, 2016a).

Unlike most child-centred, play-based early-years approaches, there is a requirement for children to develop key skills and outcomes in the FP, particularly in literacy and numeracy by the age of seven (the end of the FP). To this end, and for the purposes of monitoring school performance in these areas, attainment data for all pupils in Wales based on teacher assessments are collected in Year 2, the end of the FP. The availability of this administrative data provides a useful opportunity for evaluative research. Indeed, during the reform's infancy, Welsh Government commissioned a range of studies to evaluate the implementation and initial effectiveness of the FP, one of which considered pupil outcomes (e.g., see Siraj & Kingston, 2014; Siraj-Blatchford et al., 2006; Taylor et al., 2015). This research resulted in a series of recommendations, many of which were acted upon in subsequent years. However, the early research on pupil outcomes raised some grave concerns about the efficacy of the FP for learners from disadvantaged backgrounds (e.g., see Power et al., 2019; e.g., Taylor et al, 2015). While the FP was only in its infancy at the time, little evaluative research on the programme has followed. Given the considerable time that has elapsed since and the recent spotlighting of poverty's impact on educational outcomes by COVID-19, the FP presents a unique and timely opportunity to make a significant and important contribution to the field. Now that the specific educational context for this research has been drawn, the next concluding section of this chapter outlines the structure of the thesis.

1.5 Structure of the thesis

This first chapter has set the scene for the research. It has foregrounded the need to address persistent gaps in educational outcomes based on socio-economic disadvantage and highlighted the potential role of early education provision. The chapter has noted that while the purpose and focus of early-years curricula is contested, progressive approaches are believed to benefit children impacted by poverty and some international models are popular. However, a dearth of empirical evidence in support of the efficacy of these approaches has been noted, particularly for learners from disadvantaged backgrounds. Cautions from an evaluation of an early-years reform that draws on such curricula have been outlined and a rationale for the study provided. Finally, the chapter has described the overarching aims, objectives and questions of the research, the contribution it makes, its real-world value to the field, and introduced the particular educational policy context specific to this study.

The next chapter (Chapter Two) considers the rise of popular child-centred, play based earlyyears curricula, collectively termed progressive for ease of reference. It discusses their philosophical and theoretical foundations and relates these to their central aims and purpose. The pedagogical enactment of these ideas and theories are considered, using the literature on the widely celebrated early-years approaches in Reggio Emilia, New Zealand, and Scandinavia to illustrate their key aims and outcomes. The chapter explores how such approaches position learners from disadvantaged backgrounds and considers related theoretical and ideological critiques. The empirical literature on these programmes is explored with a focus on their efficacy for learners from disadvantaged backgrounds. Issues related to enactment and the availability of data which appear especially relevant to the evidence base on progressive education are discussed. The chapter concludes with a proposal to address the weaknesses identified in the evidence base by investigating the FP curriculum, which is summarised together with the relevant research literature on the programme in the light of preceding discussions.

Chapter Three then outlines the methodological approach of the research. It provides a rationale for the mixed-methods design and describes the data collection and analytical methods and procedures used. This includes national pupil outcome data for six consecutive Year 2 cohorts, 289 responses from a national FP Lead Practitioner survey and semi-

structured interviews of 21 teachers including three headteachers in seven case study schools. The chapter discusses ethical considerations and some reflexive considerations including the researcher's positionality, impact of COVID-19 and methodological limitations.

The empirical results are split into three chapters. The first of these, Chapter Four, examines the impact of the FP on pupil outcomes and attainment gaps in three core curriculum areas over time. It examines administrative outcome data which allows for quantitative analyses to be conducted for all Year 2 cohorts in Wales over a seven year period. Analyses include the use of regression models to consider the influence of poverty on attainment while controlling for other variables that are deemed important in the research literature. The chapter thus reveals how the influence of poverty has changed and the progress made towards reducing inequalities in attainment during the study period. Variation in attainment outcomes and progress between schools is also examined to ascertain whether patterns of progress at the national level are universally shared. Then, outcome data is linked to Taylor et al.'s (2015) case study school data to examine whether attainment is related to enactment. Finally, the key findings of the chapter are drawn together in the conclusion, setting up some of the issues to explore in the following chapters. These include improved attainment during the study period, but limited progress towards reducing the influence of poverty on educational outcomes at higher levels. Wide disparities in patterns of progress between schools were also identified, particularly towards narrowing gaps between learners. This suggested that there may have been differences in the way schools were enacting the programme, which was subsequently explored in later phases of the research.

The next empirical chapter, Chapter Five, presents results from the Lead Practitioner Survey which examines practitioner perceptions of the FP, its impact and enactment, and how these have changed over time. The structured format of the survey instrument allows for a quantitative discussion of views and practices in Wales and considers a broader range of outcomes than those reflected in measured attainment at the end of Year 2. Views of the FP in relation to pupils from disadvantaged backgrounds are explored to ascertain the extent to which teachers themselves frame the FP as beneficial for these pupils and capable of narrowing gaps between learners. The chapter also discusses reported engagement with the intended pedagogies of the curriculum, including how easy practitioners feel it is to enact the

pedagogical approach within their particular schools. This allows for a consideration of the extent to which the curriculum was being universally implemented (following up on the findings in Chapter Four) and whether there were any impediments to practice in particular schools or tensions in realising FP principles on the ground. The chapter concludes with a discussion of the key findings and identifies a number of tensions that were explored in the subsequent more qualitative phase of the research. These include an increased perception that learners from disadvantaged backgrounds especially benefit from the FP but a reduced perception that it positively impacted attainment gaps. The chapter also concluded that tensions enacting the pedagogical approach existed for some schools, which could potentially explain the implied variation in engagement with the intended pedagogies evident in the findings.

The final empirical chapter, Chapter Six, provides a more detailed examination of practitioner views and accounts of the FP using qualitative data from the case study teacher interviews. It begins by providing the contextual background for the case study schools, including their prior engagement with FP pedagogies and basic patterns of pupil attainment during the study period. The chapter explores how the outcomes and purposes of the FP are understood, how the FP is potentially enacted according to descriptions of pedagogical practice and investigates the relationship between changes in described practice and patterns of measured pupil attainment during the study period. Furthermore, because the case study schools predominantly serve areas of disadvantage, the chapter also investigates the impact of context on enactment. This includes some of the dynamics especially relevant to schools serving disadvantaged communities, how children from disadvantaged backgrounds are framed within the FP, and how gaps between them and their more privileged peers understood. Key analytical findings are drawn together in the conclusion and include differing interpretations of the FP, broader conceptualisations of outcomes, and particularly in relation to pupils from disadvantaged backgrounds, a valuing of outcomes beyond what is measured. The conclusion draws attention to tensions between the ways that outcomes are understood and measured including between different levels and contexts of practice, which combined with unique challenges particular to schools in disadvantaged areas, can make embracing the intended pedagogical approach either difficult or unlikely.

The concluding chapter of the thesis, Chapter Seven, brings the findings of the three empirical chapters together to answer the central questions of the research. It discusses them in relation to the study's central aims, their significance, the wider literature, and implications for the FP going forward. The chapter expands upon some of the key themes introduced in the empirical chapters and offers a deeper understanding of the impact of the FP on pupil outcomes, particularly for children from disadvantaged backgrounds. It acknowledges the limitations of the research, outlines the study's contribution and significance, and ends by describing the key implications of the findings and offering some suggestions for addressing them.

The thesis concludes that despite improvements in attainment and some progress towards narrowing poverty-based gaps at lower levels, progress towards mitigating the impact of poverty on higher levels of attainment was limited. While an increasing proportion of practitioners felt that learners from disadvantaged backgrounds especially benefited from the programme, the disconnect between their positive perceptions and the measured impact on higher levels of attainment speaks to fundamental tensions in how outcomes are understood and evaluated. Questions concerning how teachers make sense of mixed policy messages, how achievement in the early-years is understood and measured, and how this impacts practice are raised, along with concerns that under current funding arrangements, tensions unique to schools in disadvantaged areas may significantly limit teacher and pupil capacity to engage with the curriculum's progressive design. This has significant implications for equity and social justice in Wales.

Chapter Two: Philosophical, theoretical, and empirical foundations of early-years progressive approaches

2.1 Introduction

The last few decades have witnessed an increased focus on children in the early-years, with a large body of research literature now demonstrating the significant learning potential of this period and the importance of quality provision in shaping a range of developmental outcomes and post schooling prospects (e.g. Anders, 2015; Black et al., 2017; Deitrichson et al, 2020; McCoy et al., 2017, Smith et al., 2000; Sylva et al, 2004, 2014; Wylie & Thompson, 2003). Furthermore, research demonstrates that children from socio-economically disadvantaged backgrounds particularly benefit from early-years provision in terms of both cognitive and non-cognitive outcomes (Burger, 2010; Carneiro & Ginja, 2014; Dietrichson et al, 2020; Heckman et al 2013; Leseman, 2002; OECD, 2020; Siraj-Blatchford et al, 2002; Sosu & Ellis, 2014; Sylva et al. 2003; Tucker-Drob, 2012). As a result, the search for quality and the identification of good early-years practice have become an established focus of research and discussion within the educational field (Anders, 2015).

National curriculum policies themselves are shaped by government ideas regarding the fundamental purposes of education, usually underpinned by various theoretical frameworks about how children learn. One might also expect systemwide reforms to be informed by empirical evidence on the efficacy of their components, especially when addressing complex challenges like the attainment gap. Yet evidence suggests substantial attainment inequities related to socio-economic disadvantage remain in many nations across the globe (OECD, 2018, 2022). Therefore, if local and global ambitions of tackling persistent educational disadvantage associated with poverty are to be realised, it seems crucial to explore what is known about the efficacy of particular approaches in this regard.

To this end, this chapter investigates the research literature on some of the most celebrated models and early-years approaches around the world to see if anything can be learnt from their progressive design. It explores their purpose and pedagogy, the theories and evidence supporting them, their relation to learners from disadvantaged backgrounds, and relevant critiques. It begins by introducing progressive education and its philosophical and theoretical foundations and then considers the pedagogical enactment of these ideas and theories using the literature on some celebrated models to illustrate this and their key aims and outcomes. The chapter then explores the framing of disadvantaged learners within these curricula and related theoretical and ideological critiques. The section that follows on the efficacy of progressive approaches, particularly for learners from disadvantaged backgrounds, considers issues of enactment and the nature of outcomes which appear especially relevant to the evidence base. Next the chapter expands on the Welsh educational policy setting discussed in Chapter One by describing the particular curriculum (the Foundation Phase) and relevant findings from associated research in relation to the issues discussed so far. This completes the contextual background to the study. The chapter concludes with a summary of the main findings of this review and a proposal to address the weaknesses in the empirical knowledge base through the investigation of the research questions guiding the thesis.

The chapter's focus is predominantly on large-scale (regional or national), school-based progressive programmes with shared characteristics. While early-years provision is frequently viewed as the education of children in the period before compulsory schooling begins, this age band varies internationally. The focus of this chapter is children aged three to seven. The terms curriculum, model, approach, and programme are interchanged throughout to avoid repetition, but simply indicate the particular curriculum approach under consideration. For example, the curriculum in Reggio Emilia is sometimes known as the Reggio Emilia 'experience' or 'Reggio approach,' in the research literature (e.g., Biroli, 2017; Foreman & Fife, 2012; Gillespie, 2000; Edwards et al., 2012; Kaynak-Ekici et al., 2021 approach Lindsay, 2015; Ossai & Ramsaroop, 2022). In this thesis it is also referred to as a model, or programme or sometimes, simply 'Reggio.'

2.2 'Progressive' early-years education

The education research literature is characterised by a long and enduring debate about the relative merits of different educational and pedagogical approaches with favour waxing and waning between two in particular (Berkovich, 2021). Frequently termed as either 'progressive' or 'traditional' and often framed in opposition to one another, these curricula

and instructional approaches can be better understood as located along one continuum (see Hedges & Cooper, 2018; Philippou & Priestley, 2019; Schweisfurth, 2013; Tippett & Lee 2019). At one end of the continuum are child-centred, play-based or 'social pedagogy' approaches that draw on experiential, child-initiated or child-directed activity and have little central prescription. These are commonly described as 'progressive' curricula (e.g., see Howlett, 2013; OECD, 2001, 2006; Schweisfurth, 2013). At the other end, and often contrasted with these progressive curricular, are more structured approaches associated with teacher-led 'traditional' education or formal, 'early education' approaches, typically involving whole class activities, heavier content prescription and didactic teaching designed around academic knowledge and working towards standardised goals (Hedges & Cooper 2018; OECD, 2001, 2006; Schweisfurth, 2013). While the term 'progressive' might suggest that any other approach is not progressive in the sense of not representing modern ideas or striving for social reform, that is not the position held in this research. Tippet and Lee for instance make a case for retaining the term as an organizing concept, no matter what one's political outlook, and its association with concepts such as learning through emergent and immersive experiences, as opposed to 'the banking concept of education' (2019, p.96). Indeed, it is often used as a broad synonym for learner-centred education (Schweisfurth, 2013), which is central to all the approaches discussed in this chapter and as the term is frequently used in the research literature to convey a common set of goals and pedagogies associated with particular educational theorists, philosophers and the education reform movement, the term is used in this thesis for simplicity.

Interestingly, while debates about the efficacy of different approaches continue, progressive curricula appear particularly popular in the early-years (Grieshaber & Ryan, 2005; Kwon, 2002; Wood & Hedges, 2016). This is evidenced by the widespread celebration and emulation of late 20th century curriculum programmes in Northern Italy, New Zealand, and Nordic countries², which are united by a common set of goals and pedagogies characteristic of progressivism. Due to their widely perceived success, these models or approaches

² The literature refers to a 'Nordic model' that encompasses a 'social pedagogy approach' that is local, child-centred and holistic in contrast to a more centralised, academic curriculum (e.g. see Trohler et al., 2023; Einarsdóttir et al., 2015; OECD, 2006, 2001). So while differences inevitably exist between these countries, they are referred to under the term Nordic model, as broadly illustrative of a progressive educational early-years approach.

continue to influence early-years practice around the globe. Frequently cited as international exemplars and hallmarks of early-years best practice (e.g. Bertram & Pascal 2002, Edwards et al., 2012; Lindsay, 2015; Maynard et al., 2013; NAfW, 2003; OECD, 2006), they are drawn upon in this chapter to help illustrate the central tenets of modern progressive approaches, and to consider the support that exists concerning their efficacy in improving the outcomes of learners from socio-economically disadvantaged backgrounds. The following section explores some of their philosophical and theoretical foundations, shared goals, and central pedagogies.

Philosophical and theoretical evolution

While the term 'progressive' emerged from late 19th and early 20th century critiques of traditional education, the philosophical antecedents of progressive educational models and reforms are linked to the early ideas and philosophies about children and learning of key thinkers such as Rousseau, Pestalozzi, Froebel, and later, Montessori, and Dewey, (see Aubrey & Riley, 2019; Howlett, 2013; Reese, 2001; Williams, 2017). Progressivist ideas about childhood were informed by a Rousseaun understanding of a romantically-informed innocent child (see Rousseau, 1762) and developed by late 19th century early critiques associated with the 'new education' movement. These ideas and philosophies were seen as innovative, socio-culturally inspired and thus, 'progressive.' The 'child-centred' orientation within 'new education' was developed within a series of educational movements such as Montessory and Steiner schools which have influenced contemporary early-years practice (see Abbot et al., 2003; Aubrey & Riley, 2019; Chartier & Geneix 2000; Chung & Walsh 2000; Soler & Miller, 2003; Wood, 2007).

Often seen as a canonical text within progressive thought, is Jean Jaques Rousseau's novel *Emile* (1762). Here, Rousseau forwards a model that rejects traditional rote learning and suggests an active engagement in learning through play and experience. This relates to a key epistemological belief of the new education movement; that knowledge was generated through engagement with lived experience. This meant that constructivism, an epistemological theory that emphasises the active role of learners in building their own understanding rather than the learning of decontextualised facts fashioned into subjects,

informed the progressive approach. Progressivists therefore rejected what they viewed as the knowledge-banking, didactic, teacher-directed approach which saw children as passive in their learning. Instead, they saw the environment and the child's activity within it driven by their natural curiosity as decisive in their development (e.g., see Aubrey & Riley, 2019; Kwon, 2002; Howlett, 2013). Indeed, progressivism's historical resistance to a narrow focus on outcomes based on decontextualised knowledge is illustrated by the then Chief Inspector of Elementary School, Edmund Holmes, in his provocative pamphlet *What is and What Might Be*: within this Holmes argued that the result of such an approach 'is that the various vital faculties which education might be supposed to train become irretrievably starved and stunted' and that when the child leaves school, 'he is too often thrown out upon the world, helpless, listless, resourceless, without a single interest, without a single purpose in life' (1911, p.5).

The work of Rousseau, Froebel and Dewey was considered revolutionary at the time, if not controversial in the theorisation of children as autonomous and active rather than passive learners and the suggested focus on the child's interest (Ang, 2016). One of the drivers of the new education movement was a concern with social justice and democracy; the promotion of child-centred, experiential learning rooted in the child's interests and activity was often framed as a strategy to engage working-class children and tackle socio-economic disadvantage (e.g., see Aubrey & Riley, 2019; Fennimore, 2016; Howlett, 2013; Kwon, 2002; Semel et al, 2016; Tippet & Lee, 2019). Early pioneers, such as Margaret McMillan, acknowledged the 'capital' of different social groups in terms of how their social background framed their educational experiences. McMillan argued that progressive education should validate these experiences and, by doing so, liberate these children from all 'degradations' as they started 'to move gracefully and expressively, to sing, draw etc', no longer 'creature[s] who can give nothing but only receive' (1904, p.213).

The development of progressive ideas during the 1920s and 1930s endorsed this view of children as intrinsically curious and capable (Kwon, 2002) and were distinctly different to traditional views of education and practices common at the time (Chung & Walsh, 2000). Dewey's seminal work *Experience and Education* (1938), for example, celebrated a constructivist epistemology and called for a shift from a traditional, rigid approach toward a

participatory, experiential, and democratic model, which accepted pupils from different classes, cultures and abilities who could learn from each other (Aubrey & Riley, 2019; Stewart, 2012). However, in the early days, these progressive ideas were more commonly practiced in small, independent schools or private settings, frequently serving the middle classes with shared ideals (Cunningham, 2001; Semel et al., 2016; Semel & Sadovnik, 2008). Indeed, according to some, progressive education in small, mainly independent schools founded in the early twentieth century 'overwhelmingly attracted elite, white populations' (Semel et al., 2016, p.378). However, by the latter half of the twentieth century, interest in such approaches was reflected in educational discourses and provision around the globe (Abbott et al., 2003; Soler and Miller, 2003). Their expansion was associated with developments in psychological research and theories about how children learn from cognitive and psychological science (Howlet, 2013, Schweisfurth, 2013, Sylva & Halsey 1987), to the extent that 'psychology became seen as an increasingly worthwhile and legitimate means of validating educational practice' (Howlet, 2013, p.121). The imprimatur of science thus afforded a significantly different, new, empirical approach, since prior to the early 20th century, most educational thinking had focused on philosophical debates about learning (Stewart, 2012).

Behaviorist theories and frameworks of learning associated with traditional, authoritarian, input-output, transmissive approaches to education drew on experimental research that studied learning by observing changes in behaviour (see Daniels & Shumow, 2003; Stewart, 2012). These theories influenced education during the early to mid-20th century but began to fall out of favour as major theoretical advances in research in cognitive science and developmental psychology challenged their dominance and moved the field towards integrating individual, developmental, social, and cultural perspectives of early learning and development (Wood, 2007). The consequent incorporation of cognitive and psychological theories in education drew on the legendary work of psychologists such as Jean Piaget and Susan Isaacs, and the physician, Maria Montessori (e.g., see Daniels & Shumow, 2003; Howlett, 2013; Slee & Shute, 2003; Stewart, 2012; Wilson & Peterson, 2006).

Cognitive theories focused on the thinking process and saw knowledge as 'constructed' by the child through their active participation, interaction and sense making in the world and

revised through further experience (Doherty & Hughes, 2014; Stewart 2012). Piaget's theory of cognitive development for instance, held that children participated in the creation and recreation of their understanding through interacting with the environment, and their development progressed through broad, universal stages that individuals reached at different times (see Senent et al., 2021; Stewart, 2012; Waite-Stupiansky, 2017). This theory, which became more widely known as constructivism, shares a similar epistemological perspective with Dewey's ideas on the child learning. It emphasises active, relational, and social knowledge acquisition, and formed the basis of much progressive pedagogy (Semel & Sadovnik, 1999; Windschitl, 2002) and the movement towards 'Developmentally Appropriate Practice' (e.g., see Walsh et al, 2010a). So, while early debates around childhood and learning were primarily philosophical, scientific research during the 20th century gave these ideas and theories authority and saw them influence mainstream practice.

Piaget's theories were further developed by psychologists such as Vygotsky and Bruner, whose observations emphasised the social competences of the child and the role of language, family, peers, and social and cultural norms and experiences in learning and differences between individuals (Hedges & Cooper, 2018; Keenan et al., 2016; Shute & Slee, 2015; Slee & Shute, 2003; Stewart, 2012). Vygotsky's socio-cultural theory, positioned play as a leading activity in early childhood, helping to foster everyday concepts (Hedges & Cooper, 2018) and a 'zone of proximal development,' a social context where adults and more able peers assist children to move between their current developmental level and their potential developmental level, as particularly important in the construction of new knowledge (Vygotsky, 1978). In this zone, cognitive growth occurs as a result of interactions and teachers play a critical role in extending the potential of individual learning, helping children to achieve far more than they could on their own (Stewart, 2012). Wood, Bruner, and Ross (1976) built on this idea developing the concept of 'scaffolding', frequently referred to today.

These theories, and research generally on early childhood before 1980, were mostly derived from studies by developmental and cognitive psychologists rather than educationalists (Abbott et al., 2003). However, developments in neuroscientific research offered them further support, particularly around the idea of children as active agents in their learning and the role of scaffolding (Ginnis, 2002; Schweisfurth, 2013). Furthermore, the importance of

supportive teacher-pupil interactions received significant empirical attention by educationalists and now has a strong evidence base (e.g., see Howard et al., 2018; Payler et al., 2017; Siraj-Blatchford et al., 2002; Siraj et al., 2016; Sylva et al., 2004). Together, these theoretical developments had significant implications for developments in pedagogical practice. Their view of learning, particularly the child as active in the construction of knowledge, capable of making sense of the world, and the importance of cultural and environmental contexts, classroom interactions and dominance of play, differed markedly from previous frameworks or philosophies of practice and are central to the internationally celebrated early-years programmes inherent within the Nordic model, Reggio, and New Zealand's curricula and their intended pedagogical approach. This is explored in the following section.

Modern progressive approaches

While the previous section discussed the development of progressive education from a philosophical and epistemological perspective, one can see these theories and ideas manifest in the celebrated progressive programmes introduced above. This section therefore focuses on the enactment of these ideas, particularly in the form of pedagogy which the chapter will later show using the example of play, is highly contested. Indeed, it is important to review the aims and pedagogical design of these programmes to appreciate their potential effectiveness. This can be achieved by drawing on their curriculum documentation and research literature, which suggests a shared emphasis on active, experiential learning, a child's ability to be self-motivating and directing, and the positioning of responsive interactions between adults and children as pivotal for learning (e.g., see OECD, 2004; Stephen, 2006). Indeed, Maynard et al. (2012) explain that while these programmes draw on constructivist theory, they are all underpinned by sociocultural theories that emphasise the significance of relationships, participation, and culture (also, see Nuttall, 2002; MoE, 2017). For example, they all appear to start with an assumption that children are self-motivated, competent, independent, eager, and able to learn. This is explicit within Reggio where educators see 'the extraordinary competence of children' (Edwards et al., 2012, p.18), who are 'rich in potential, strong, powerful, [and] competent' (Malaguzzi, 1993, p. 10). A key tenet of practice here is a view of children as capable co-constructors of knowledge (e.g., see Lindsay, 2015; Moss, 2016; Senent, 2021). Similarly in New Zealand's Te Whariki, children are

positioned as 'confident and competent learners from birth' (MoE, 2017, p.12), while the starting point for education in the Scandinavian reforms of the 1990s was the 'self-learning and competent individual', who was 'self-managing and responsible for their own learning' (Hultén et al., 2022, p.243). The view of children as competent and self-motivated is particularly important in these programmes since children are expected to work independently, construct their own knowledge, and learn from their environment and peers.

There is also an emphasis on active learning and discovery, exploration, and play, often referred to as 'experiential learning' in these curricula. The intention of Te Whariki for example, is that children learn through active exploration of the environment where play including spontaneous play, is valued as meaningful learning, and involves 'doing', asking questions, interacting with others, trying out theories and making purposeful use of resources (MoE, 2017, p.46). Similarly, in Sweden, the epistemological underpinning of the curriculum is reflected in the intention that knowledge is developed through 'play, social interaction, exploration and creativity' (Swedish Ministry of Education and Science, 1998, p.6) while an emphasis on play is shared by all Nordic countries (Einarsdóttir et al., 2015). Likewise, the Reggio curriculum is described as a 'voyage of discovery' where pupils learn through play, experimentation, and construct their understanding through interactions with others and environmental resources (e.g., see OECD, 2004; Rinaldi, 2021; Senent et al., 2021; Stephen, 2006).

All programmes are also described as responsive to the child's interests, evident in their emphasis on child-directed or initiated activity and pedagogical use of play. For instance, staff in Reggio devise an emergent curriculum following the child's interests (e.g., see Lindsay, 2015; Rinaldi, 2021; Senent et al., 2021) and in Nordic countries there is a pedagogical emphasis on children pursuing their own activities (Einarsdóttir et al., 2015). Indeed, in Danish early-years settings children typically spend only thirty minutes per day in adultinitiated or adult-structured activities and are free to choose with what and with whom to play in a child-centred pedagogical environment for the rest of the time (Winther-Lindqvist & Svinth, 2021), while in New Zealand teachers develop a local, culturally responsive curriculum adapting teaching approaches and environments as necessary (MoE, 2017).

Aligning with constructivist theories, peer-to-peer learning, collaboration, group activity and the environment are also emphasized in these curricula. Learning in Sweden for instance is based 'not only on interaction between adults and children, but also on what children learn from each other' (Swedish Ministry of Education and Science, 1998), a pedagogical goal of Te Whariki is to encourage children 'to learn with and alongside others' (MoE, 2017, p.24), while learning through 'reciprocal interactions with others' through collaborative group work is encouraged in Reggio (Stephen, 2006, p.11). The environment is pivotal to learning within these models and is usually thoughtfully and richly resourced. One of the 'key tenets' of practice in Reggio for instance is the environment as the 'third teacher' (Lindsay, 2015, Rinaldi, 2021), while in New Zealand, the 'educational environment' has detailed learning goals and should include the provision of 'a wide range of resources and opportunities to engage with important cultural tools' (MoE, 2017, p.61 & p.21). Scandinavian and Nordic countries are well known for their traditional cultural emphasis on the outdoors and facilitating learning through the use of the outdoor environment (e.g., see Ringsmose & Kragh-Müller, 2017; Sandseter, 2014; Sandseter & Lysklett, 2017).

Furthermore, teachers are clearly 'facilitators', assisting learning through responsive, reciprocal relationships. In Reggio for instance, practitioners are guides who learn with children and seek to encourage their thinking, negotiation, and exploration as they coconstruct their understanding through reciprocal interactions with adults and peers (e.g., see Edwards et al., 1998, 2012; Malaguzzi, 1993; Rinaldi, 2005; Stephen, 2006). Similarly, Swedish early-years education 'is built on caring interaction with other children and adults' (Pramling, 2004, p.23), children in Nordic countries learn through the shared tenet of warm and cooperative social relationships (Einarsdóttir et al., 2015) while learning through 'responsive and reciprocal relationships' is a fundamental principle of Te Whariki (MoE, 2017, p.21). This clearly demonstrates the influence of socio-cultural theories in these curricula, where families and communities are also central. Reggio for instance focuses on community and family engagement, and community partnerships are a 'key tenet' of practice (Lindsay 2015; Moss, 2014), early education in Nordic countries involves working in cooperation with parents (Einarsdottir et al., 2015), while in New Zealand, teachers are expected to work with families to understand their priorities for learning, design the local curriculum and promote and extend children's development (see MoE, 2017). However, it is not only the intended
pedagogical approach of these programmes that diverge from those of more traditional curricula, their central purposes and outcomes seem broader too, as the next section demonstrates.

Purposes and outcomes of modern approaches

The philosophical ideas of early progressive thinkers are manifest in the purposes and outcomes of these curricula, which do not relate to outcomes based on learning decontextualised knowledge. Instead, educational outcomes are framed in relation to holistic development, emphasising cross disciplinary skills, attitudes, values, and wellbeing, and therefore relate to the fostering growth concept espoused by early progressivists (e.g., see Holmes, 1911). It is important to review the aims and outcomes of progressive curricula, since they are relevant to how the success of these programmes might be measured. All of the modern programmes reviewed promote personal values, pupil well-being, and holistic, socio-emotional development: Swedish early-years teachers, for example, focus equally on 'all aspects' of development including emotional and social (Pramling, 2004, p.23); Nordic countries focus on socio-emotional factors including the development of self-esteem, self-image, and self-confidence but also social competence (Einarsdóttir, 2015); in Reggio, 'each child's intellectual, emotional, social and moral potentials are carefully cultivated and guided' (Gardner, 2012, p.xiv); while 'holistic development' is a central principle of Te Whariki (MoE, 2017).

There are also clear orientations towards social justice within their aims which include the provision of equitable access and opportunities for learning, and raising critical thinkers who are active rather than passive learners, prepared for active participation in a democratic and just society (e.g., see Lindsay, 2015; MoE, 2017): The Reggio approach seeks to 'accomplish progressive ideals of defending and promoting the rights and potential of all children' (Edwards et al., 2012); democracy is promoted both as something to acquire and a process for decision making and developing justice and equity in the Swedish curriculum (e.g. see Pramling, 2004; Stephen, 2006); central tenets of Nordic early education include equality, egalitarianism, democracy, freedom, welfare, justice and emancipation, which are framed as international benchmarks for schooling (e.g., see Einarsdottir et al., 2015; Trohler et al.,

2023); while empowerment is another core principle of Te Whariki, which makes a strong political statement about young children's rights in society (MoE, 2017; OECD, 2004).

Creativity and self-expression appear to be central to both pedagogy and outcomes in these models, with a particular focus on visual art, aesthetics, and self-expression in Reggio (e.g., see Edwards et al., 2012; Lindsay, 2015); discovering different ways to be creative and expressive in Te Wahariki (OECD, 2004); while creativity and the arts are a strong feature of all Nordic curricular (Einarsdóttir et al., 2015). A particular emphasis is also shared on the development of positive dispositions towards learning and skills such as problem solving and collaboration. Swedish learning goals for example include cooperative and problem-solving skills, 'as well as an ability to learn to learn' (Pramling, 2004, p.23), while developing learning competencies and dispositions are central to both Te Whariki and Reggio (OECD, 2004; Stephen, 2006).

The emphases in these progressive curricula appear to demonstrate a much broader purpose for education than improving academic or disciplinary knowledge in subjects like reading, writing and arithmetic central to traditional curricula. Indeed, their outcomes seem substantially 'softer' and arguably, less easily measurable than academic, knowledge-based outcomes. It is noted for example, that content knowledge is secondary to learning about how to learn in Reggio (Stephen, 2006) and the 'broad' outcomes of Te Whariki emphasise holistic goals rather than "hard" knowledge-based areas and the acquisition of selected skills' (OECD, 2004, p.20). Indeed, McPhail (2016) explains that New Zealand's Ministry of Education's favoured discourse is that education is about learning how to learn and process rather than content, while other authors suggest there is a lack of subject knowledge in Te Whariki (e.g., Blaiklock, 2010; Hedges & Cullen 2005a). Indeed, the provision of space for initiatives from teachers and children in these programmes effectively treats knowledge as a moving target, situated by context, and emerging through the learning process in which discovery plays a key role, so what is learned is not predetermined (Tippet & Lee, 2019). There is of course a related debate about the relationship between 'hard' or decontextualised subject based knowledge and soft outcomes in terms of whether the development of soft outcomes facilitate greater acquisition of hard knowledge later on, or whether hard knowledge is a necessary foundation for some softer outcomes. However,

while attempts have been made to measure this (e.g., see Gutman & Schoon, 2013, 2016; Heckman et al., 2006; Lechner et al., 2019), no firm consensus has been reached.

This issue is important for a number of reasons. If we are considering the effectiveness of these approaches for different learners, it raises questions about the criteria that can be used to judge them. Carr (2001) for example explains that the focus on holistic goals rather than hard knowledge in Te Whariki renders assessment of the programme difficult, a point raised by Johnson and Hayes (2016), who explain that learning to learn as opposed to mastery of a particular body of knowledge presents unique challenges for assessment compared with traditional approaches. While this is important in terms of judging the impact of any educational programme (a matter that will be returned to later in the chapter), there are fundamental social justice issues at stake in relation to learners from disadvantaged backgrounds. These concern the focus of curriculum approaches in relation to the provision of access to and acquisition of forms of domain knowledge which may mitigate disadvantage, a central critique of progressive education. Indeed, given the social justice orientations of progressive approaches, it is important to consider some of their theoretical and ideological critiques, especially with regard to learners from disadvantaged backgrounds. This is the purpose of the next section.

2.3 Progressive approaches and the disadvantaged learner

Framing of learners from disadvantaged backgrounds within progressive curricula

As inequalities in educational outcomes based on socio-economic disadvantage exist throughout the world (Gorard, 2018; OECD, 2017b), one might expect modern curriculum reforms to explicitly attend to them. However, an early-years curriculum review of 20 countries found only one nationally agreed curriculum specifically designed to address social disadvantage (see Bertram & Pascal, 2002). Indeed, while the celebrated programmes described so far have clear commitments to social justice, they appear to be less explicit with regard to targets for narrowing disparities in educational outcomes based on poverty.³ While several of the National Education Goals in New Zealand focus on equity for example, these are more general in terms of attaining educational opportunity for all and increased participation and success related to identity rather than class based targets for addressing social justice (see OECD, 2023).

This lack of focus seems surprising given the general and global acknowledgement of poverty's role in academic disadvantage. Furthermore, without explicit discussion, it is difficult to discern the extent to which the progressive design of these programmes is expected to narrow poverty-based disparities in educational achievement. That said, even though each of these models were designed to respond to different contextual issues, benefits for disadvantaged learners are clearly implied through their references to equity of access, increased contextual relevance, and inclusion. Indeed, advocates of progressive education in general argue that a child-centred, culturally relevant, experiential curriculum, responsive to the child's interests, experiences, knowledge and understanding of the world, might help to validate and increase engagement and motivation of learners from disadvantaged backgrounds, particularly through a more meaningful curriculum that reduces the dissonance between home and school (e.g., see Andersen & Andersen, 2017; Francis et al., 2017; McPhail, 2016; McPhail & Rata, 2016; Wrigley et al., 2012). Some argue that curriculum relevance, is a precursor to engagement and subsequently, achievement, and is particularly important for children from disadvantaged backgrounds (e.g., see Hayes et al., 2006; Perry & Francis, 2010). Thus, progressive approaches are seen to remedy the charge against traditional content-heavy, didactic, age-based curricula, with narrowly focused assessment regimes, of causing pupils from disadvantaged backgrounds to experience a sense of failure and marginalisation and to disengage from their learning because they are not recognised as successful in those terms (Howlett, 2013; Lupton & Hayes, 2021; Power et al., 2019).

³ However, Sweden for instance, has lower levels of inequality in the first place and has long been known for its pursuit of equality of opportunity, while its education policy has long-standing egalitarian goals which include equality of outcomes (Bjorklund et al, 2006; Beach, 2018).

Furthermore, longer-term advantages for pupils from disadvantaged backgrounds are also implicit within progressive education's aims and ideological narrative as committed to social justice and democracy. It is argued for example that through the progressive classroom, children learn to internalise empathy and compassion, leading to authentically cooperative behaviours, while the spirit of inquiry, collaboration, and common purpose are framed as the foundation for adult commitments to socially just communities (Fennimore, 2016). The construction of fair and equitable school environments, combined with powerful modelling by progressive teachers, are framed as capable of providing 'hope in the possibilities of the future' to 'children in even the most impoverished circumstances' (Fennimore, 2016, P.68). Indeed, Schweisfurth (2013) forwards a strong emancipatory discourse, underpinned by the perspective that existing forms of schooling (prescribed, content-led, passive learning) reproduce inequalities. However, it is the end goal of what children learn through progressive approaches that matters to the emancipatory narrative with its focus on transforming individuals and society (Schweisfurth, 2013, P.27). While these potential benefits are important, they are clearly long-term and may be less immediately transparent in the form of reduced inequalities in educational achievement in the intervening years. However, despite the generally positive framing of these curricula for children from disadvantaged backgrounds, as suggested earlier, there are some relevant theoretical and ideological critiques to consider.

Theoretical and ideological critiques

Ang (2016) explains that during the twentieth century, writers began to contest the inherent contradictions within child-centred education, raising questions about the way children's learning and education were perceived within such a paradigm (e.g., see Burman, 2008; Cannella 1997; Cannella and Viruru 2004; Dahlberg et al., 2007; Grieshaber 2008; Walkerdine 1990). In the UK, critiques of progressive pedagogy were particularly prominent following the Plowden report. However, while there is a significant body of theory which engages with the epistemological underpinnings and pedagogy of progressivism generally, this section is concerned with critiques from a social justice perspective. This is because a number of philosophical and ideological arguments position progressive approaches (as described in this chapter) as working against these goals.

One such critique relates to the lack of engagement with epistemically structured, or decontextualised disciplinary 'knowledge'. Theorists argue that the switch in emphasis from learning specific disciplinary knowledge to outcomes expressed as skills and dispositions through learner-centred, experiential approaches avoids engagement with and reduces access to expert or 'powerful knowledge' (Young, 2008, 2008a) that children from disadvantaged backgrounds need most (e.g., see Barret & Rata, 2014; Hoadley & Muller, 2009; Rata, 2012; Wrigley, 2018; Young, 2013, 2014, Young & Muller, 2010, 2013, 2014). Within this critique lies a belief that experience by itself is not a sound basis for important reliable knowledge which locally developed education led by learner choice downgrades (e.g., see Lauder et al., 2012, McPhail & Rata, 2016; Young & Muller, 2010). Some argue that if experiential knowledge differs from high status or disciplinary knowledge, the provision of 'engaging' curricula to disadvantaged or marginalised children 'may further entrench their disadvantage by precluding access to high status education and career paths' (Francis et al., 2017, p.421). This high status, or epistemically-structured knowledge is also seen as a central resource for deep learning (McPhail, 2020), with a powerful transformative value that frees those who access it by enabling them to imagine alternative and new possibilities and think beyond the limits of their experience (Hoadley & Muller, 2009; Young and Muller, 2014).

Critics hold that opportunities to explore ideas based on children's experiences and observations outside of school may be more limited for children whose range of experiences are impacted by poverty (Andersen & Andersen, 2017). Here, knowledge stemming from experience, potentially limits the knower to that experience and so a shift to localised knowledge fixes working-class groups to a never-ending present (Rata, 2012). Child-centred models may therefore facilitate a narrowing rather than a broadening of horizons, and risk further social segregation (Francis et al., 2017) while the conceptual knowledge and objective thinking required for critical reasoning and political agency, a powerful class resource, is denied (see Rata, 2012; Young, 2008). This critique warns that where experiential knowledge becomes the main source of curriculum, the powerful and liberating force of disciplinary or epistemologically-structured knowledge for reducing inequality is threatened, by preventing access to it (Christodoulou 2014; Moore, 2014; Rata, 2012; Young; 2008; Young 2010; Young & Muller, 2010).

Some of the problems with translating progressive ideas into curricula relate to the misrepresentation of constructivism as a pedagogy rather than an epistemology. As Rata explains, an over-dependence on social experience as the means and content of knowledge, renders it the pedagogical resource and central source for the curriculum, thereby treating them as one and the same (2012). Theorists warn of a 'progressive education fallacy in confusing process with product' (Guthrie, 2012, p.253), and stress a need to distinguish pedagogy and curriculum, and recognise constructivism as an epistemological theory of learning rather than an instructional technique (e.g., see Airasian & Walsh, 1997; Guthrie, 2012; Windschitl, 2002).

Attention is also drawn to the limits of dominant psychological theories of child development like constructivism for deciding what and how to teach since they do not account for political and moral concerns within education (e.g., see Luke & Grieshaber, 2004; Walsh, 2005). Windschitl (2002) for instance explains that constructivism cannot direct policy about social justice and equitable schools because it is merely a theory describing learning. Furthermore, cognitive scientists intentionally isolate mental processes when studying the mind but as these are not isolated in classrooms, authors highlight the stark differences between child development theories and the conditions in which learning occurs in practice that render their application difficult (e.g. see Schweisfurth, 2013; Shute & Slee, 2015; Willingham, 2021; Windchitl, 2002). Authors explain that the idealised design principles from learning science and the broader rhetoric of the reform movement do not account for the diverse social circumstances in which children are socialised, and potential conceptual, pedagogical, and cultural complexities involved in practice which can prevent theoretical ideals from being realised (Power et al., 2019; Windchitl, 2002).

Similarly, theories based in developmental psychology are accused of failing to address the characteristics of the institutions in which children are educated and the host of teacher skills required (Power et al., 2019; Windchitl, 2002), with Cremin observing that a commitment to build on students' needs and interests demanded 'extra-ordinary feats of pedagogical ingenuity' (1961, p.348). Vygotsky's (1978) approach to learning for example requires a mentor's attentive care and skill in small groups or pairs, but little attention is paid to the larger number of children typically found in Western early education contexts and the limited

opportunity to know where all learners are in the developmental process to extend them (Gallimore and Tharp, 1990; Senent et al., 2021). Ang (2016) questions for example how some of the central tenets of progressivism such as recognising the uniqueness of the 'individual child' translate into practice in a classroom of 25–30 children whose experiences and learning are considerably diverse but are essentially constructed around a uniform curriculum. Similarly, Burman (1994) describes tensions related to how teachers can respond to individual interests and oversee and extend development in a class of 30, while Graue (2005) questions how the concrete reality of variability in development including behaviour, norms, cultural meanings, and the discursive apparatus that leads discussion to ideas of variation or development, can be addressed in heterogeneous classrooms.

These criticisms are especially relevant to schools in areas of high deprivation where the diverse needs, backgrounds, and particular experiences of learners within them may be difficult for a lone teacher to address. Authors warn that without appropriate scaffolding from more knowledgeable adults, these pupils may not be able to construct their own learning since they cannot know what they do not know (e.g., see Young and Muller, 2010). Furthermore, a school's socio-economic makeup may impact what children can learn from each other, since research shows disparities in how advanced children's thinking is and that interpersonal dynamics can work against group sense-making and the negotiation of meaning during collaborative work involving social and cognitive processes (Taylor & Cox, 1997; Windschitl, 2002). This raises questions about the ability to meet the assumptions of peer learning inherent in these approaches and achieve equitable learning outcomes through group activity in schools in disadvantaged areas. Indeed, given that assumed resources like teacher time and small classes are in scarce supply in most schools, it is perhaps unsurprising that attending to all children's individual needs within 'the real world of classrooms' is framed as one of the greatest challenges and sources of critique (Schweisfurth, 2013).

A further body of criticism argues that the notion of the competent, autonomous, and agentic learner, is unsubstantiated, inflates children's capabilities and undermines the social differentiation of knowledge, its development and construction within epistemic boundaries, and the differences between children (Hirschman and Wood, 2018). Here, the portrayal of knowledge as generic and held open to any learner who can learn the processes and

competencies of learning in the absence of an expert or an associated body of learning is criticised (Hirschman and Wood 2018). This, and the notion of children as innately competent, is framed as 'risky' as adults' responsibilities to children may be 'actively neglected' (Buckingham, 2000, p.5). Indeed, Graue's (2005) research suggests certain children become invisible in child-centred classrooms guided by developmental philosophies and robbed by a lack of interaction with teachers to fine tune relationships between child and teacher, and activity and learning.

The ability of all children to engage equally with progressive child-centred approaches has been challenged by a perceived disjuncture between their underlying assumptions and variations in children's home lives (e.g., see Brooker, 2005; Power et al., 2019, 2020; Sadovnik, 1995; Semel, 1995; Semel et al., 2016). This body of criticism frequently uses Bernstein's work (e.g. 1977, 1990, 2000) to theorise how progressive or learner-centred approaches resonate better with some social groups than others, and how less privileged children may be disadvantaged by a weaker classification of knowledge, framing of control and open, implicit or invisible pedagogy (e.g., see Andersen & Andersen, 2017; Power et al., 2019, 1920; Schweisfurth, 2013; Semel et al., 2016; Young & Muller, 2010). This critique maintains that the underpinning assumptions and expectations of these approaches have particular social origins that privilege certain kinds of interactions and cultural repertoires, with children from low socioeconomic backgrounds less able to decode the inherent invisible or implicit pedagogy and expectations (e.g., see Andersen & Andersen, 2017; Norquay, 1999; Power et al., 2019).

Indeed, authors accuse the approach of being overly reliant on Western-dominant ideology and developmental psychology that promotes a normative or universal construction of children, childhood and education (Ang, 2016). Some argue that not only are the implicit frames of reference unlikely to be shared by all members of a heterogeneous classroom, but that different patterns of communication and a lack of knowledge of each other's experiences can separate teachers and children from diverse backgrounds, and that teachers may find it challenging to include the unfamiliar as equal (see Chan, 2019; Windschitl, 2002). Perhaps this is why most Reggio-inspired schools in the United States, according to Smith (2014), serve affluent populations. In fact, Cunningham (2001) argues that so many

progressive educational initiatives were developed in the private sector with shared ideals between parents and teachers that progressive pedagogical practices were hardly transferable to universal schooling. Others have expressed concern that child-centred education may militate against equality of opportunity and access to the curriculum since individual or group choices may be biased in terms of culture and social class, and result in unequal power relationships (e.g., see Wood, 2007; Wood, 2014). Social justice, some argue, may require teachers to become interventionists rather than chiefly facilitators of children's learning (Ryan & Grieshaber, 2004; Ryan & Ochsner, 1999).

Studies suggest that child centred, play-based, free-choice approaches may not benefit all children if they're inconsistent with culturally-situated practices at home (see Ang, 2016; Brooker, 2002; Cannella & Viruru, 2004; Wood, 2014). Research highlights that social and cultural complexities of play for instance, require repertoires of skills for successful participation, the implication being that any benefits may not be uniformly accessible to all children (Wood & Chesworth, 2017). This is evident in Brooker's (2005) observations of school readiness based on children's ability to learn independently through play. She found class and cultural background differences between children who were assessed as ready and those who were not. This critique therefore suggests that universal assumptions about children's abilities to engage in and benefit from these approaches do not account for children's repertoires of choice, play, and how freedom to choose may advantage some while disadvantaging others (Wood, 2014).

One final critique relevant to learners from disadvantaged backgrounds worth noting is that the enactment of child-centred, invisible pedagogies is framed as more resource intensive and requiring a second site of learning, like the child's home, where they are encouraged to learn (Power et al., 2019). Yet this critique argues that working class homes are less likely to have the type and level of cultural and material resources required and warn that without the 'right' kind of home learning environment, under-privileged children attending schools with fewer resources, like suitably qualified teachers and levels of teacher—pupil ratios to implement the invisible pedagogy properly, may become 'doubly disadvantaged' (Power et al., 2019). This is an important point, since the research literature suggests that pupils from poorer socio-economic backgrounds are more likely to attend less well-resourced schools

(e.g., see Gorard, 2018; Lupton & Hayes, 2021; Payler & Davis, 2017). While other sociological critiques exist (see Langford, 2010), the above body of criticism alone highlights the need to find empirical evidence on the efficacy of systemwide child-centred, progressive approaches in terms of their ability to achieve equitable outcomes for all learners. However, as Power et al., (2019) note, it is here that such approaches present the researcher with a number of theoretical and empirical challenges. These will be illustrated next.

2.4 Effectiveness of progressive models and approaches

Issues of enactment

Locating empirical support (or otherwise) for systemwide, progressive early-years programmes is not easy, and the research literature suggests this is because of two key tensions. The first relates to issues of enactment, which are important to consider in their evaluation. For example, a large and well-established body of literature describes the complexity of effecting change in any large scale educational reform and the gaps that can exist between curriculum policy and practice, or the prescribed, intended and enacted curricula (e.g. Blignaut, 2007; Braun et al., 2011; Fullan 1993, 1997, 2000; Fullan & Pomfret 1977; Durlak & Dupre, 2008; Priestly et al., 2021; Priestly & Minty, 2013; Spilane et al., 2002, Stenhouse, 1975; Supovitz, 2008). However, research suggests there are particular challenges with the implementation of progressive reforms, largely because they involve understanding and translating a range of often complex philosophical ideas, learning theories, and demanding, but loosely defined, pedagogical concepts.

The research literature on the programmes described earlier, for example, predominantly focuses on features of their method and enactment, or translation into classroom practice (e.g., Chan & Ritchie, 2016; Elinarsdottir et al., 2015; Fitzgerald, 2016; Hesterman, 2017; Kaynak-Ekici et al., 2021; Lanphear & Vandermaas-McNally et al., 2017; Murris, 2017; Nygard, 2017; Peeler, 2017; Rinaldi, 2012; Ritchie, 2005; Senent et al., 2022; Smith, 2003; Strong-Wilson et al., 2007; Trohler et al., 2023; Westerberg & Vandermaas-Peeler, 2021; Ward, 2016). Indeed, the focus of much of the research on progressive approaches generally is on the interpretation of key concepts like play, child-centredness and constructivism, their

slipperiness, and various ways they are enacted. Research suggests that the more loosely defined pedagogical concepts characteristic of progressivism have numerous meanings and are prone to widely differing interpretations and translations, even within explicitly progressive schools (Schweisfurth, 2013). To illustrate, Chung and Walsh (2000) found more than 40 interpretations of the term 'child-centred,' characterised by layers of complex and sometimes contradictory meanings which they felt challenged the consensus use of the term, and that contemporary discourses ignored. Furthermore, international research and comparative studies demonstrate that the way in which the concept is formalised, interpreted, and operationalised, differs widely (even within the same geographical and cultural context), partly because of its weakly defined boundaries, abstract nature, theoretical hybridity and complex history (e.g., see Bertram and Pascal, 2002; Cambell-Barr, 2017; Chung and Walsh 2000; Dahlberg et al., 2007; Langford, 2010; Schweisfurth, 2013; Taylor et al, 2015). This, research suggests, renders its application problematic (Dahlberg et al., 2007).

There are similar parallels in the translation and enactment of the concept of play, with considerable debate surrounding its ideal format, amount of structure and relationship to learning (e.g. Anders, 2015; Abbott et al., 2003; Bodrova, 2008; Bradley et al, 2011; Bubikova-Moan et al, 2019; Georgeson et al., 2015; Hedges & Cooper, 2018; Hedges & Cullen, 2012; Martlew et al, 2011, Miller & Pound, 2011; Moyles, 1989, 2010; Wood, 2014). Research suggests that the practical application of the construct is problematic, varied, and that significant gaps exist between the rhetoric and reality of the classroom (e.g., see Abbott et al., 2003; Bodrova 2008; Hunter & Walsh, 2014; Stephen, 2010; Wood 2004, 2014). Play as a source of curriculum is therefore framed as contentious (Payler et al., 2017). Furthermore, the interpretation and enactment of concepts such as 'constructivism,' 'developmentally appropriate' and 'active learning' inherent within progressive approaches, are not consistent or straightforward either (e.g., see Martlew et al., 2011; Stephen, 2010; Stephen et al., 2010; Van Horn et al., 2005; Walsh et al, 2010; Windschitl, 2002). Applying constructivism in practice is framed as particularly difficult because of its philosophical, psychological, and epistemological underpinnings (Windschitl, 2002), while 'reconciling the idea of active learning with the practical pedagogical realities such as large numbers of children in the primary classroom' has proven difficult for some (Martlew et al., 2011, p.81). Indeed, a

common theme in the research literature concerns the complexities of enacting many components of progressive approaches in general when faced with the practical demands of the classroom.

Research suggests then that when it comes to progressive programmes, the potential for gaps between the intended curriculum (i.e., as envisaged by policy makers and described in the policy documentation) and practice appears vast. Indeed, the tensions identified between intended and enacted curricula and differences in the way they are translated in the research literature on the early-years programmes discussed implies this might be the case (e.g., see Chan & Ritchie, 2016; Cullen, 1996; Dalli, 2011; Einarsdottir et al., 2015; Gunn & Nuttall, 2020, Hedges, 2013; Jensen et al., 2010; Nygard, 2017; Rameka & Soutar, 2020; Shuker & Cherrington 2016; Te One, 2013; Te One & Ewens, 2019). In New Zealand for example, tensions are observed between the theoretical understanding of the curriculum and practice and as a result, child-centred pedagogy is framed as neither guaranteed nor unproblematic (e.g., see Chan & Ritchie, 2016; Dalli, 2011; Te One, 2013). Indeed, while some express concern over the lack of knowledge on how the curriculum is enacted in different settings across the country (Blaiklock 2013; Meade et al., 2013; Smith, 2013), other researchers have argued that many enactment challenges require addressing in order to 'actualise the promise' of Te Whariki (Rameka & Soutar 2020; p.53). Research suggests a need to strengthen teacher education around how to enact it in practice and provide further guidance around literacy pedagogies and appropriate assessment (McLachlan, 2019).

It is inevitably difficult to assess the effectiveness of a programme if the programme is not being enacted as intended. While the literature on Reggio-Emilia in Italy centres on its history and uniqueness, research on the transportation of particular Reggio constructs elsewhere reveals difficulties and variation in practice (e.g., see Emerson et al., 2021; Kaynak-Ekici et al., 2021; Maynard & Chicken, 2010; Murris, 2017). In fact, the research literature suggests the enactment of progressive approaches is so varied that in its purest or most aspirational form, Schweisfurth claims learner centred education 'is not practised at a systems level anywhere beyond isolated classrooms' (2013, p.11). Likewise, Gardner observes that 'so much has been written about progressive methods in education, but so rarely are the ideals of progressive education actually realized' (2012, p. xvii).

However, it is particularly important to consider their enactment in disadvantaged contexts, especially since research suggests that these schools tend to offer fewer enrichment activities, a stronger academic or traditional orientation, whole-class instructional focus and emphasis on basic skills generally (e.g. see Hayes et al., 2009; Knapp et al., 1995; Lupton, 2004; Lupton & Hayes, 2021; Lupton & Hempel-Jorgensen, 2012; Power et al., 2019, 2020; Stipek, 2004; Thrupp, 1999). Indeed, Schweisfurth (2013) observes disparities between how far schools catering for different socio-economic groups adopt child-centred approaches in the research literature and even within national programmes with progressive goals and pedagogies, research suggests that schools in areas of high deprivation tend to offer a narrower or more basic, less 'progressive' curriculum than those in more privileged ones. McCoy et al., (2012) for example, found that children attending socio-economically disadvantaged schools in Ireland were more likely to be offered more traditional teachercentred approaches and less likely to experience the more active methodologies associated with the progressive curriculum. Similarly, a narrower and less embedded curriculum with a greater focus on 'the basics' was found in disadvantaged settings in Wales compared to schools in more advantaged ones (Power et al., 2019, 2020). Research therefore suggests their realisation may be particularly compromised in disadvantaged contexts.

While there have been calls to obtain a better understanding of why instruction varies by the social-class composition of schools (e.g., Diamond, 2007), research suggests that those in disadvantaged areas suffer a myriad of problems, frequently facing pressures like greater social, emotional and behavioural needs, high levels of staff turnover, less qualified and experienced staff, fewer resources, higher numbers of children with special educational needs and an increased need for discipline to facilitate learning (Gorard, 2018; Horgan, 2007; Lupton 2004, 2005, 2006; Lupton & Hayes, 2021; Lupton & Hempel-Jorgensen, 2012; Muijis et al., 2004; Thrupp, 1999). What's important here, is that such pressures may be more relevant to the enactment of this type of curriculum than a more traditional, teacher-led one and, potentially, impact the ability to meet its underpinning theoretical, philosophical, and pedagogical principles. Indeed, Schweisfurth observes that learner-centred education can be most difficult to implement where its 'claimed benefits are needed and wanted most' (2013, p.142). Resources for example are particularly important for achieving the high adult:child ratios to support and extend learning through play, to furnish the environments with

appropriate equipment to maximise opportunities for the active learner and provide rich learning experiences. But these higher resource demands may have implications for the kind of pedagogy that children from disadvantaged backgrounds experience where resources are more limited (Power et al., 2019). Indeed, research in England suggests that the ability of practitioners to engage in creative pedagogies is challenged by the material poverty and social and emotional difficulties that learners bring into the classroom (Lupton & Hempel-Jorgensen, 2012) and a comparative case study of Reggio inspired settings in America found resources were one of the main factors that allowed 'the private school to be more loyal to the philosophy than is the public one' (Abdelfattah, 2015, p.1085).

Thus, the research literature suggests the translation of progressive approaches into classroom practice is not straightforward and may vary considerably between practitioners and schools. This raises several concerns. Firstly, if there is a lack of systemwide implementation, it presents difficulties for evaluating the efficacy of these programmes. Uneven enactment for example makes it difficult to judge whether outcomes can be attributed to the implementation of the approach or the relative lack of it (Power et al, 2019). As Stephen (2010) highlights, when pedagogical concepts are so variously interpreted it is difficult to sustain the argument that they are pivotal to the success of children's learning. It is perhaps partly for this reason that the research picture on progressive approaches remains far from clear (Anders, 2015). This body of research also has implications for social justice in terms of achieving equitable pedagogical experiences, but empirical evidence here is scarce. However, in attempting to review the evidence on the efficacy of these approaches, the following section highlights a second tension, concerning some philosophical and methodological issues of measurement related to the nature of outcomes.

Tensions surrounding outcomes

This section illustrates these tensions by highlighting the debates surrounding the measurement of outcomes associated with progressive curricula. It then reviews the available empirical research on the effectiveness of the progressive programmes above and discusses some of the justifications for the absence of attainment data. Finally, the section

ends by outlining some social justice grounds for the appraisal of pupil attainment data within education systems.

The nature of outcomes and their relation to underpinning philosophies and debates about measurement

Firstly, unlike more traditional curricula, the holistic and dispositional goals of progressive education are more difficult to assess, and fundamental issues have been raised that render their valid measurement problematic (Carr & Claxton, 2002; Luke et al, 2013; Sadler, 2002; Stephen, 2006; Tobias & Duffy, 2009). The identification of appropriate measures of success is also problematic because progressivism tends to be antithetical to the ideals of testing and measurement, and advocates refuse to recognise and characterise knowledge in such hierarchical and quantitative terms (Howlett, 2013). Combined with their broader, less easily measurable goals, it is perhaps unsurprising that empirical support is lacking.

For example, researchers attribute the lack of empirical literature on Reggio both to scepticism about research on 'efficacy' and the philosophy of the approach which contests the relevance of empirical research on outcomes (Biroli et al., 2018; Emerson & Linder, 2021; Senent et al., 2021). Indeed, Senent et al. observe an 'intentional' absence of set criteria for evaluating approaches inspired by Reggio that 'disrupts standardized research designs and educational interventions' (2021; p.1254), while Edwards et al. (2012) explain the long-term impact or benefits of the Reggio experience cannot be measured using empirical data because education is viewed differently in Italy. They explain quantitative assessments are not employed and test scores not used to measure the benefit of the approach at an individual level, because the goal is to make an impact on quality of life at a community level. Similarly, Tveit and Lundahl (2023) describe scepticism and resistance toward early formal grading within Nordic education, with a view it can undermine the motivation of lowachieving pupils. This scepticism is aligned with many researchers of early-years practice who question the fundamental concept of testing children at such a young age and the use of agerelated norms (e.g., see Bradbury, 2017; Dahlberg & Moss 2005; Moss, 2015; Moss et al., 2016; Roberts-Holmes & Bradbury, 2016).

The underpinning philosophies of these approaches therefore present methodological problems for research and authors argue that the benefits of learner-centred approaches are rarely defined in ways that enable claims to be empirically explored (Power et al., 2019). Fyfe (2012) explains for example that formal assessment, or assessment informed by behaviourist or empiricist philosophical orientations is not part of the general Reggio concept. Children's development is 'boundless', and the designation of an end point for the sake of outcome measurement truncates growth, contradicts Reggio's core principles and is hence unavailable for the purposes of interrogation (Emerson & Linder, 2021; Gillespie, 2000; Senent et al., 2021). Indeed, researchers highlight that narrow, comparative assessment models are difficult to reconcile where children co-author their development, the curriculum is led by their interests, learning seen as non-linear or non-hierarchical and standardization incongruent with an emergent curriculum (Emerson & Linder, 2021; Sennet et al., 2021).

Similarly, in New Zealand full-cohort national tests do not exist and while teachers are given responsibility for assessing learning (Nusche et al., 2012), some observe challenges relating to 'how to recognise learning, what to record, and how to document it' (Te One, 2013, p.25). Indeed, Blaiklock (2013, 2017) highlights that progress in key areas over time cannot be demonstrated due to the lack of requirement to assess specific domains of learning such as language development, while Mutch notes that 'what constitutes quality and equity' is highly contested (2013, p.13). Furthermore, progressive assessment techniques that do aim to capture learning such as New Zealand's 'Learning Stories' or Reggio's 'Documentation' evolve, are discursive and unamenable to quantification and cross-learner comparisons (Stephen, 2006).

Empirical evidence

While some attempts have been made to empirically demonstrate the benefits of these programmes on language for example and softer outcomes such as creative, social, play and critical thinking or inquiry skills, these are largely small-scale, experimental studies in a single or small number of schools in contexts outside of the countries the programmes originated in (e.g., Fernández-Santín & Feliu-Torruella, 2020; Gencer & Gonen, 2015; Inan, 2021; Ossaii & Ramsaroop, 2022, Ozkan, 2021; Reynolds et al., 2011; Westerberg & Vandermaas-Peeler,

2021). Few robust, large-scale studies on the efficacy of these programmes on outcomes such as maths and literacy in the originating countries were identified for this review, especially for disadvantaged learners. There is also some acknowledgement in the literature of a lack of robust empirical evidence on the efficacy of these models over other curriculum types (e.g., see Blaiklock, 2010, 2013; 2017; Biroli et al., 2017; Chambers et al., 2010; Dodd-Nufrio, 2011; Emerson & Linder., 2021; Jensen, 2009; Nuttall, 2005; Somer, 2019). Despite its international reputation for example, no evaluative outcome research was identified on the efficacy of Te Whariki compared to other approaches, upon which Blaiklock comments extensively, expressing concern over an apparent lack of empirical critique and quality and methodological weaknesses in the evidence that is sometimes cited to support it (2010; 2013; 2017). Authors also acknowledge a lack of outcome research on the efficacy of Reggio, with some observing that 'despite its widespread recognition, the Reggio Approach has never been formally evaluated and there is no rigorous empirical evidence of its effects on children's life-cycle outcomes' (Biroli et al., 2017, p.2). A comprehensive review of empirical research on Reggio inspired programs outside Italy also concludes 'there is no empirical outcome research to support the efficacy of the implementation of Reggio inspired programs or practices' (Emerson & Linder, 2021, p.434). Similarly, Jensen explains that 'so far no study proves sufficient evidence that the Nordic model is more (or less) efficient than the international efficiency model programme',⁴ (2009; p.18), which has been attributed to a lack of ability to directly compare the Nordic model to types of academically run child-care within Nordic countries (Sommer, 2019).

While this review suggests little is known about the differential impact of these particular programmes on pupil outcomes, there are two large-scale studies that attempted some outcome research. The first examined the efficacy of the Reggio approach over other Italian childhood programs for a range of outcomes that included IQ, socio-emotional skills and longer-term outcomes using data for just over 4,000 respondents drawn from discrete cohorts (see Biroli et al., 2018). Relative to not receiving any formal care, this study found that the Reggio approach significantly boosted a range of outcomes but not however, when compared with alternative forms of provision. They attribute these findings to the number of

⁴ The 'international efficiency model programme' is aligned to a more academic, traditional approach.

similarities between the programs investigated, which is a central weakness of the research since it was attempting to compare the efficacy of the Reggio approach over *different* types of provision. The study also lacked observational data, was potentially affected by response bias, and did not conclude anything about the efficacy of the program for different groups of learners or pupils from disadvantaged backgrounds.

The second piece of research investigated the impact of student-centred approaches on achievement and equality in Denmark using administrative data on end of school attainment and parental socio-economic background of pupils in 825 (71% of) Danish schools (see Andersen & Andersen, 2017). This research looked at how student-centredness and social competencies were prioritised according to headteachers and found that student-centredness correlated negatively with achievement in general, and with achievement for disadvantaged students in particular. While these findings are concerning, level of child-centredness was determined by a survey of headteachers' expressed or intended priorities for the school alone, at a single time point which 1) may not reflect prioritisation or instruction in the classroom, 2) did not account for early-years instructional experience or prior achievement, and 3) the outcome data only related to maths attainment at age 16 and the authors acknowledge that other learning domains may have been more positively impacted.

The scarcity of empirical research on the efficacy of these programmes, particularly for different groups of learners, may seem surprising given the global reputation these systems enjoy. However, there is a recognised dearth of 'robust evidence' for progressive approaches in general, positioned by some as 'stronger on assertion than evidence' (Abbott et al., 2003, P.22). That said, a comprehensive international evaluation of the impact of structural and process characteristics of pre-primary settings offered some positive support for a more progressive orientation on age-seven cognitive and language performance (see Montie et al., 2006). This research identified a number of consistent findings across all participating countries that supported the availability of a high variety of equipment and materials, and the use of child-initiated and small-group activities. However, while this study examined the activities of 1,000 children in 426 settings aged four and their subsequent cognitive and language performance at age seven, it did not include educational experience or setting

characteristics between the ages of four and seven or comment on the differential impact on learners from different backgrounds. Even an international review of universal preschool programmes and long-term outcomes found that despite being considered as particularly beneficial for children from low socioeconomic backgrounds, few studies compare preschool types and outcomes (Dietrichson et al., 2020). Instead, empirical research tends to focus on discrete local programme or intervention evaluation rather than wider systemwide approaches, particularly when it comes to learners from disadvantaged backgrounds (e.g., see Abbott et al., 2003; Burger, 2010; Chambers et al, 2010; Elango et al., 2015; Feinstein et al., 2017; Grudnof et al., 2017; Jensen et al., 2013; Melluish, 2004; Payler et al., 2017; Sosu & Ellis, 2014).

It is also difficult to gain insight from the evidence base on the efficacy of individual pedagogical elements of these approaches (such as play, child-centredness or developmentally appropriate practice) as the research literature suggests this is also limited or the evidence is mixed (e.g. see Anders, 2015; Abbott et al., 2003; Education Endowment Foundation, 2023; Power et al., 2019; Schweisfurth, 2013; Stephen, 2006; Van Horn et al., 2005; Walsh et al., 2010; Wood, 2007; Wood & Chesworth, 2017). A number of empirical reviews conclude that play for instance is not underpinned by systematic empirical research, or the evidence is weak, or inconsistent (Abbott et al., 2003:14; Education Endowment Foundation, 2023; Stephen, 2006) while methodological weaknesses in the (mixed) evidence on 'child-centred learning' and 'developmentally appropriate practice' are also noted (Anders, 2015; Schweisfurth, 2013; Van Horn et al., 2005; Walsh et al., 2010; Wood, 2007). While a recent research review concluded that experiential learning had a strongly positive effect on children's motivation, engagement, agency, wellbeing, and academic achievement, the review predominantly drew on studies of discrete experiential learning activities, courses, or interventions rather than systemwide approaches and did not consider differential effects or comment on children from disadvantaged backgrounds (see Ranken et al., 2023).

Of particular concern to this thesis, is that little empirical attention is paid to the efficacy of these approaches or their pedagogical elements for pupils from disadvantaged backgrounds. A recent systematic review of research on play for instance concluded there were not enough studies to explore the relationship between play-based learning and disadvantage

(Education Endowment Foundation, 2023). While there appears to be a body of empirical work supporting direct or explicit instruction over minimally guided discovery or experiential learning for less able or less experienced learners (e.g., see Kirschner et al., 2006), it is beyond the scope of this thesis to review them. Furthermore, difficulties exist in terms of isolating the impact of one pedagogy from another (which potentially defies the holistic principles of progressive approaches) and disentangling the relationship between pedagogy and differential learner outcomes within approaches that employ a range of pedagogies (Power et al., 2019). While a body of research supports the efficacy of discrete curriculum programs that specifically target pupils and families affected by disadvantage such as the Abecaedarian and Perry Preschool projects, and Head Start in America (e.g. see Barnett et al, 2007; Cambell et al., 2002 Carneiro & Ginja, 2014; Garcia et al, 2016; Heckman et al., 2010, 2013; Kline and Walters, 2016; Ludwig & Miller, 2007; Puma et al., 2005; Schweinhart et al., 2005; Schweinhart & Weikhart 1997) these studies do not relate to how universal or system-wide progressive reforms such as those discussed in this thesis might differentially impact the outcomes of pupils affected by poverty.

Indeed, it is precisely because of a lack of evidence that Hedges and Cooper claim early-years practice became 'grounded in developmental theories and child-centred ideologies' (2018, p.371), an argument echoed by others positioning the devotion to and reification of these theories and ideologies to 'articles of faith' (Howlett, 2013; Power et al., 2019). Blaiklock (2013) for example references the 'gospel like status' of Te Whariki, while Maton likens student-centred learning to a faith-based religion where 'belief is everything, including belief there must be evidence supporting the belief' (Maton, 2013, p.161). Indeed, specific weaknesses in the evidence base identified by others are extensive and include research design; causality; implementation fidelity; the qualitative, small-scale, highly contextualised nature of evidence; use of teacher impressions rather than learner outcomes and rejection of counterevidence on the basis that the practice under examination was not truly learnercentred (e.g., see Abbott et al., 2003; Maton, 2013; Power et al., 2019; Schweisfurth, 2013; Semel et al., 2016). This review also suggests that few studies include a focus on learners from disadvantaged backgrounds or involve system-wide evaluations. While Chambers et al., conclude there remains 'a long way to go' in terms of 'what constitutes the most effective forms of early childhood programmes for improving the outcomes for children at risk due to

poverty' (2010, p.54), one might argue there is even further to go when it comes to understanding the differential impacts of systemwide progressive approaches.

Social justice rationales concerning the collection of attainment data

However, for some, the lack of outcome data is not a problem, since a focus on data, comparison, and the reframing of social justice to equity in educational attainment is seen as reductionist and focused on narrow outcomes that fail to account for or address wider societal, structural, and social barriers to educational achievement (e.g., see Lingard et al., 2014), a particularly valid point. Furthermore, a large body of research indicates that a focus on attainment or a narrow range of outcomes, particularly within high stakes testing environments actually creates unequal educational experiences with consequences for learners in schools in disadvantaged areas (e.g., see Berliner, 2011; Lingard et al., 2013, 2014; Lupton & Hayes, 2021; Luke et al, 2013; Payler et al., 2017; Thompson & Harbaugh 2013; Thrupp, 1999, Wyse et al., 2015b, Wyse & Torrence, 2009). Research suggests such a focus has a washback effect on curriculum and pedagogy and becomes the de facto curriculum, defining a particular and limited version of a 'successful learner' that marginalises some children who don't see themselves as successful in those terms (see Bradbury, 2012; Lupton & Hayes, 2021; Lupton & Hempel Jorgensen, 2012; Roberts-Holmes & Bradbury, 2016; Wood et al., 2017b). As such, a focus on attainment data represents a risk for learners from disadvantaged backgrounds in terms of equitable curriculum experiences and may have implications for the kinds of conclusions that can be drawn from these approaches when enacted at scale.

Conversely, regardless of educational approach adopted, there is a social justice imperative to measure attainment, so that any differential impact on groups of learners can be determined when applied systemwide. Early achievement in subjects like maths and literacy have been shown to be strong predictors of later achievement (Duncan et al., 2007; Hannon et al., 2020; OECD, 2010; Schweinhart & Weikhart, 1997) and, used sensitively, some argue attainment data can help raise school and teacher expectations of children from disadvantaged backgrounds, assist in developmental diagnostic decisions, and help to establish how well a curriculum meets the needs of pupils affected by poverty (Luke et al.,

2013; Sosu & Ellis, 2014). The lack of administrative attainment data is clearly problematic here.

Taken together, this section suggests a clear need for further research, especially from a social justice perspective. There are also widespread calls for further research more generally, particularly for high quality, systematic, quantitative, qualitative and mixed methods research on the benefits, challenges and efficacy of progressive approaches implemented at scale (e.g., Chambers et al., 2010; Dietrichson et al., 2020; Emerson & Linder, 2021; OECD, 2004; Schweisfurth, 2013; Taylor et al., 2015). There is also a recognised need for careful empirical analyses of their impact on the outcomes of disadvantaged learners (e.g., Chambers et al., 2015; OECD, 2004; Semel et al., 2016). Indeed, Andersen & Andersen (2017) call for data on child-centred teaching at the teacher level in other countries to examine in greater detail 'how different instructional contexts facilitate social class dynamics and inequality in the process of education' (2017, p.547). This, one may argue, is where the unique context of Welsh Educational Policy is especially helpful.

2.5 The Foundation Phase – A case for inspection

There is a body of relevant empirical research on the enactment and impact of the Welsh curriculum reform for three-to-seven year-olds worthy of consideration. This curriculum, the Foundation Phase (FP), is a progressive, learner-centred, play-based programme with underlying aims, philosophies, and a pedagogical approach similar to the celebrated systems described above. Indeed, as outlined in Chapter One, the design of the FP explicitly draws on the early childhood programmes of Reggio Emilia, New Zealand, and Scandinavia (Maynard et al., 2013) but there is also a particular focus on raising the achievement of children experiencing poverty and narrowing attainment gaps (e.g., see Welsh Government, 2016a, 2016b). However, rather unusually for a progressive curriculum, attainment data for all pupils at the end of Year 2 (when children are approximately seven years old), is available for interrogation. So, while this curriculum may not be internationally renowned like the systems discussed above, the research undertaken on it to date, and the availability of national attainment data, provide a useful empirical base from which to explore how progressive

programmes may differentially benefit learners when implemented at scale. This next section then, describes the main features of this curriculum and early research findings.

The Foundation Phase curriculum

As described in the introduction, the FP represented a significant departure from its more formal, competency-based predecessor and was rolled out nationally in 2008/9 (see Taylor et al., 2016b). While developmental in approach, it is similar to the progressive curricula discussed in that it is underpinned by a 'constructivist but largely sociocultural' pedagogy (Maynard et al., 2013, p.xi). Likewise, its aims are broadly progressive and include greater motivation, concentration, and enhanced learning dispositions by age seven, together with increased engagement, enjoyment, standards of attainment, involvement of families and, particularly for those from disadvantaged backgrounds, improved wellbeing, social and emotional development, and learning dispositions (Maynard et al., 2013). With a 'key policy objective' of narrowing gaps in the achievement of different groups of learners (Welsh Government, 2016a), its aims appear to be both broad and ambitious.

The implementation guidance requires schools to interpret the curriculum in the way that best suits their context using a play-based approach reflective of the curriculum's underpinning philosophy (DCELLS, 2008a, 2008d; Maynard et al., 2013). Although the subjects Mathematical Development and Language, Literacy and Communication, are skills focused with specified learning outcomes, children are expected to 'learn through first-hand experiential activities with the serious business of play providing the vehicle' (DCELLS, 2008b, p.4). The FP emphasises progressive pedagogies including peer-to-peer learning, individual and group activity, collaboration, and engagement with families, while the environment plays an important educative role (see Welsh Government, 2016a). Indeed, the teacher is positioned as 'observer' and 'facilitator', learning 'alongside,' and 'responding' to the needs of individual children, while prompting, challenging, and supporting them as they initiate and direct their own learning (Welsh Government, 2016a, p.8; DCELLS, 2008c, p.32, 2008d).

However, all pupils in the final year of the FP are assessed by teachers and awarded numerical grades of attainment. Welsh Government state that the 'headline measure of

performance' for seven-year-olds is the FP indicator which comprises language, literacy and communication; mathematical development; and personal and social development, wellbeing and cultural diversity (2013, p.13). Administrative data is collected and published for these 'core' subjects, for which the general expectation is that the majority of seven-yearolds will attain Outcome 5⁵, although curriculum guidance states that 'all areas of learning are connected and have equal importance' (Estyn, 2009a, p.38). Therefore, while in many ways the FP is similar to the progressive models described in the earlier, it is acknowledged that the collection and publication of attainment data at a system level is unusual and tensions between its holistic approach, progressive aims, and the measurement of attainment in this way are noted (e.g. see Maynard et al., 2013). It is also worth noticing that the policy documentation refers to 'closing gaps in *achievement* as well as raising the attainment of all' with a particular focus 'on raising the achievement of children experiencing poverty' [author's emphasis] (Welsh Government, 2016a). It is not clear from the curriculum documentation whether attainment and achievement are one and the same or whether achievement refers to somewhat broader unmeasured outcomes and if so, how the accomplishment of this aim will be evaluated. This is important, as according to the OECD (2023) monitoring and evaluation frameworks play a crucial role in ensuring that measures taken in pursuit of educational goals are having the desired impacts. But a review of the FP curriculum documentation raised concerns over a lack of detail regarding how the impact or success of the FP with its broad aims would be measured (Maynard et al., 2013). Teacher assessed grades are clearly only one outcome.

Empirical research on the Foundation Phase

As outlined in Chapter One, the wider Welsh policy context includes an aim to reduce the impact of poverty on educational outcomes and the attainment of learners eligible for free school meals (FSM) is used as a proxy measure for children from disadvantaged backgrounds. Using this measure, the gaps between these learners and their non-eligible peers is examined at key assessment points throughout schooling (e.g., see NAfW, 2015; Welsh Government, 2013, 2014). This approach is employed by both government and academic analyses of the impact of policy measures aimed at reducing the impact of poverty on educational outcomes,

⁵ Welsh Government have since stopped the collection and publication of this data.

including the FP (e.g., see NAfW, 2015; Pye et al., 2017; Chicken et al., 2015a; Power et al., 2019; Welsh Government, 2013, 2015a, Taylor et al., 2015). So, while attainment is only one potential outcome of the FP, the convention in Wales includes a focus on it, and this was reinforced by wider educational policy reforms introduced by different educational ministers after the FP was rolled out⁶. Indeed, tensions were noted between the FP and the focus of these reforms which were considered contrary to the ethos of the FP (e.g., see Chicken, 2019; Evans, 2021; OECD, 2014, 2017). They included for example an increase in external accountability measures; the introduction of a Literacy and Numeracy Framework; National Tests for all Year 2 children (approximately seven years of age); and benchmarking and categorisation of schools based on pupil attainment⁷.

In the light of this focus, and moreover, the findings of this review, it is perhaps unsurprising that early research found practitioner understanding, interpretation and subsequent enactment of its broad aims and pedagogical elements varied substantially across the country, exposing particular gaps between the intended and enacted curriculum (e.g., see Lewis, 2016; Morgan, 2016; Siraj & Kingston, 2014; Siraj-Blatchford et al., 2006; Taylor et al., 2016). Clarity was a particular issue for teachers charged with its enactment who struggled to understand key terminology and enact the sophisticated pedagogies associated with the more open, progressive approach (Siraj & Kingston, 2014; Taylor et al., 2015). Power et al. (2019) also observed a narrower curriculum and greater focus on the basics in schools with high levels of disadvantaged learners, echoing findings from the wider research literature. The early research on the FP issued recommendations for Welsh Government, who responded by providing a range of additional resources, training, and guidance materials to help practitioners make better sense of the policy, and an action plan explaining the curriculum's pedagogical principles and central priorities for practice (see Welsh Government, 2016a). Indeed, it is here that closing attainment gaps and focusing particularly

⁶ Welsh Government Poverty Action Plan for example included the target 'To narrow the gap in attainment levels between learners aged seven eligible for free school meals and those that are not eligible for free school meals, who achieve the expected levels at the end of the Foundation Phase, as measured by the Foundation Phase Indicator, by 10 per cent by 2017' (2013, p.14)

⁷ National tests are part of the annual national data collection cycle. Data is used for research and statistical purposes and to inform the All Wales Core Data Sets used by schools, local authorities, regional consortia, Welsh Government and Estyn (the education inspectorate) to monitor and evaluate the performance of the education system (OECD, 2017).

on raising the achievement of children experiencing poverty was positioned as one of the four central priorities for action in the FP.

The identification of this as a priority was important, since Taylor et al.'s., study found that while the introduction of the reform was associated with an overall improvement in attendance, wellbeing, attainment outcomes and a perception among teachers that it especially benefited pupils from disadvantaged backgrounds, there was no evidence to suggest it had reduced inequalities between learners based on FSM eligibility (Taylor et al., 2015; Waldron et al., 2014a; Waldron et al., 2014b). Moreover, it suggested those living in poverty (i.e., FSM eligible) were potentially less likely to gain than their more privileged peers (Power et al., 2019; 2020). These findings raised concerns about the reform's 'very limited impact' on reducing differences in the attainment of key groups of children, 'especially' pupils eligible for FSM (Taylor et al., 2016, p.312). However, while Taylor et al.'s research employed a range of statistical techniques to control for the relatively small non-random samples of pupils, it was conducted during the reform's infancy, when significant uncertainty and variation in its enactment existed.

Furthermore, research suggests major reforms require at least three years to become implemented well enough to effect outcomes and that complicated designs may require even longer to be implemented as intended (e.g., see Felner et al., 2001; Durlak & Dupre, 2008; Fullan & Pomfret, 1977). It was perhaps too early to draw conclusions about the impact of the programme at the time of Taylor et al.'s evaluation. It is possible that since this early research, the identified variation in understanding and enactment of the programme has been addressed and practice might now be more aligned with the curriculum's design. However, there is little published research to evidence this. Even assuming this is the case, there appears to be no empirical research on the impact of the FP on pupil outcomes or attainment gaps since the early work conducted by Taylor et al., so it remains unknown whether their findings and associated implications were borne out following the longer-term implementation of the programme. Thus, despite the potential of the Welsh case to shed light on the differential impact of systemwide progressive approaches, the evidence base to date remains far from clear. One can perhaps see why progressive pedagogy, as Semel et al., (2016) observe, continues to be challenged, particularly by those who believe more

structured or traditional knowledge-based schooling is needed for children from low-income backgrounds. This thesis hopes to shed some much-needed empirical light on the issue, through building on the early work on the FP and addressing the research questions outlined in the next section.

2.6 Conclusion and Research Questions

This review has demonstrated that despite the widespread popularity of progressive earlyyears approaches, the international celebration and emulation of particular educational models, and a common perception that pupils from disadvantaged backgrounds especially benefit from such approaches, there is a relative lack of evidence on their efficacy in terms of pupil outcomes when implemented at scale. Indeed, that a progressive approach is particularly beneficial for pupils from disadvantaged backgrounds is contested, with criticisms relating to a lack of empirical evidence and debates about access to powerful knowledge and the privileging of certain middle class, cultural and material norms and characteristics. The weaknesses in the evidence base supporting these approaches can be attributed to a range of factors including a lack of administrative attainment data (which is antithetical to the goals of progressivism); the less easily measurable goals and softer outcomes central to these approaches; and issues of validity raised by the gap between the written curriculum and its enactment which is particularly problematic with the more loosely defined pedagogical concepts characteristic of progressivism.

While not internationally renowned, the aims and pedagogies of the FP in Wales seem broadly symbolic of progressive early-years approaches and rich data sets on attainment are available. Early empirical studies of the programme raised concerns over equity, yet teachers believed it particularly benefited children from disadvantaged backgrounds. However, research found that practitioner interpretation and enactment of the FP varied significantly, possibly because the policy was in its infancy at the time. As this body of empirical work was conducted so soon after curriculum roll-out, and little related research has been conducted since, the full impact of the programme is unknown. However, as the FP has been in place for ten years now, allowing plenty of time for the programme to embed, it provides a useful empirical example of a systemwide progressive early-years reform. Furthermore, a strong empirical starting point is offered through access to the case studies of Taylor et al.'s (2015) evaluation, and as national attainment data is available, a unique opportunity exists to evaluate the impact of a systemwide progressive approach on pupil outcomes and outcome gaps over time. The overarching aim of this thesis therefore is to examine the impact that large-scale progressive early-years curriculums have on pupils from disadvantaged backgrounds. The aim comprises two research objectives which are addressed through the investigation of the research questions outlined below.

Research Objective 1: To examine the extent to which the Foundation Phase has impacted attainment in the early-years and mitigated the impact of poverty on pupil outcomes.

This will be explored by addressing the following specific research questions:

- 1. How has pupil attainment in the Foundation Phase changed between 2011/12 and 2016/17?
- 2. To what extent has the Foundation Phase mitigated the impact of poverty on pupil outcomes during this period?
- 3. How is enactment of the FP related to measured outcomes during this period?

While this first set of questions are clearly attainment focused, this is driven by the availability of data and the way in which poverty, outcomes and closing gaps between learners are measured within the Welsh Education system and framed in Educational Policy. However, as the research acknowledges that attainment is only one possible outcome, the following, second set of questions attempt to embed attainment within a wider exploration of equity and achievement through the consideration of teachers' interpretations of the aims and outcomes of the FP and their relation to equity. This allows for a broader appreciation of the curriculum's impact, whilst accounting for the way it has been interpreted and enacted.

Research Objective 2: To examine how the Foundation Phase is enacted and perceived by practitioners, particularly in relation to children from disadvantaged backgrounds.

This will be explored by addressing the following specific research questions:

- 1. How do teacher interpretations of the FP relate to attainment, other educational outcomes, and perceptions of equity?
- 2. How have they changed during the study period?

The next chapter will outline the methodological assumptions and procedures that underpin the investigation of these questions in the rest of the thesis, and hence provide the methodology of the research.

Chapter Three: Methodology

3.1 Introduction

The overall aim of this study is to examine the impact of a progressive early-years reform the Foundation Phase (FP) - on pupil outcomes. The literature review demonstrated the importance of and limited research on the efficacy of progressive approaches, particularly with regard to learners from disadvantaged backgrounds. However, it also highlighted the complex nature of evaluating systemwide curriculum reforms. This is what this study attempts to do. It was therefore important that the research objectives and methodological design addressed this complexity. Drawing on the methodological literature, this chapter outlines the methodological approach adopted to tackle the study's aims and objectives and answer the research questions (described in section 3.2). It aims to provide the reader with a detailed account of the research design, data collection and analytical procedures to create transparency in the research process, enable the validity of the research to be evaluated and replication of the method in future research (Hammersley and Atkinson, 2007).

The chapter begins by outlining the pragmatic, mixed-methods approach, and philosophical position of the research. Then it demonstrates how the research objectives are addressed by outlining the research questions and sequential design of the study, and the data collection process which capitalised on three contrasting methods, each complementing and informing the research process. The chapter proceeds in the order of the three-phased explanatory design frame, summarised in Figure 3.1 below. This figure outlines the order in which the different research components were conducted. The chapter proceeds by describing Phase One first, which utilised administrative data, and then Phases Two (a self-completion survey) and 3 (semi-structured interviews) together, since while conducted sequentially, they addressed the same research questions. Next, the analytical approach and procedures are discussed, before reflecting on relevant ethical and reflexive considerations, including my positionality within the study, the impact of COVID on the research, and the study's limitations. The chapter draws to a close with a brief conclusion.

Figure 3.1: Three-Phased Sequential Explanatory Design Frame



3.2 Methodological approach and design

This section discusses the methodological or paradigmatic position of the research, something that is encouraged when researchers engage with mixed-methods designs that employ methodologies commonly associated with divergent philosophical positions (see Bryman, 2008; Maxwell & Loomis, 2003; Shannon-Baker, 2016). Describing the paradigmatic assumptions of the research also helps the reader to understand the study findings and this section therefore outlines the rationale for the approach, its paradigmatic position, and the main features and phases of the design.

Methodological approach

Mixed-methods research usually involves collecting, analysing, and interpreting quantitative and qualitative data within a single study (e.g., see Leech & Onwuegbuzie, 2009). This practice is now well established (e.g., see Clark, 2008; Creswell et al., 2011; Tashakkori & Teddlie, 2003; and the Journal of Mixed-methods Research), and has been described as the 'third' paradigm or methodological movement (e.g., see Gorard & Taylor, 2004, Johnson & Onwuegbuzie, 2004; Leech & Onwuegbuzie, 2009; Tashakkori & Teddlie, 2003). The central premise is that the combination of quantitative and qualitative methods and data can provide a better understanding of complex social problems and phenomena than either approach by themselves (Creswell & Plano Clark, 2007; Maxwell & Loomis, 2003). Hence, they are popular for studies of complex social problems, including educational research (Molina-Azorin, 2016; Leech & Onwuegbuzie, 2009; Tashakkori & Teddlie, 2003). Traditional criticisms of mixed-methods research have centred on the 'incompatibility thesis' which holds that quantitative and qualitative methods are underpinned by different paradigms (i.e., positivist and constructivist/interpretivist) with incompatible assumptions that prevent meaningful integration (Dawadi et al, 2021; Tashakkori and Teddlie, 2010). However, these claims have been widely rejected with opponents arguing that combining approaches can be meaningful, complementary, and achieve greater insight (e.g., see Bryman 2012, Cresswell, 2014, Teddlie and Tashakkori, 2012). Furthermore, empirical research has demonstrated how quantitative and qualitative methods can be effectively integrated to offer a comprehensive understanding of complex problems (e.g., Feilzer, 2010; Whitley et al., 2020). A mixed-methods approach appeared to offer substantive benefits compared to a quantitative or qualitative method alone. It enabled a more comprehensive and nuanced understanding of the enactment and impact of the FP and allowed the elaboration and clarification of results from different methods, expanding the breadth and range of the inquiry, and for the results from one method of data collection to inform the design of others (see Greene et al, 1989). This was seen as especially valuable for achieving the aims and objectives of this research. Furthermore, the mixed-methods approach is underpinned by a pragmatic epistemology which foregrounds the research questions that the study asks. Indeed, pragmatism is framed as offering a legitimate framework for mixedmethods inquiries (e.g. see Feilzer, 2010) and was considered an especially useful orientation for this research.

Authors such as Dewey (1916) provide a philosophical underpinning for pragmatism which others have built upon arguing it provides an epistemological basis for educational research (e.g., see Hammond, 2013). A pragmatic orientation sees knowledge as provisional, generated through a dialectical, flexible process, as a transaction between agent and environment with research strategies dependent on what is appropriate in particular circumstances or seen to best answer the research questions (Feilzer, 2010; Hammond, 2013). This study is pragmatic as it foregrounds the research questions, the ability of different methods to answer them and issues of practicality in the choice of research design. Accounting for the complexity of the research topic and the study's design that it built upon was also central to methodological decisions rather than philosophical frameworks (e.g., see Greene & Hall., 2010). A multifaceted approach for example was integral to the study's ability

to address and account for the inherent complexity of researching the curriculum, educational reform and enactment highlighted in the research literature (e.g., see Fullan & Pomfret, 1997; Fullan, 1993, 2000; 2008, 2016; Durlak & Dupre, 2008).

Proponents argue that pragmatism offers an opportunity to move beyond positivistconstructivist paradigm wars and reduce the problems associated with singular methods (e.g., see Feilzer, 2010; Greene & Hall., 2010; Onwuegbuzie & Leech, 2005; Sechrest & Sidani, 1995; Shannon-Baker, 2016). A quantitative focus on measured outcomes alone would not account for the contextual factors framed as important to appraisals of educational policies, their enactment, pupil achievement and determining how outcome data should be understood (e.g., see Lupton, 2004; Durlak and Dupre, 2008). It would also ignore a range of social justice rationales for accounting for contexts that may pose significant challenges for policy and practice (e.g., see Durlak and Dupre, 2008; Thrupp & Lupton, 2006). This was particularly relevant to the aims of this research. Furthermore, a purely quantitative focus on attainment data would have represented a limited view of achievement and the curriculum's success. The research recognised that achievement and gaps between learners could be conceptualised and measured in different ways, and this is reflected in the way data was collected and understood in the study. Indeed, authors suggest pragmatism provides an important basis for understanding curriculum holistically (Wyse et al, 2015) and, like others (e.g., see Greene & Hal, 2010; Mackenzie & Knipe, 2006; Onwuegbuzie & Leech, 2005), I felt that the strengths and associated philosophies of quantitative and qualitative methods could be usefully and effectively employed and best addressed the research questions that are outlined next. This seemed more important than loyalty to or the hegemony of a particular research paradigm.

Research questions and design

To account for the different ways achievement and gaps between learners can be conceptualised and measured, both attainment that had been quantified using externally prescribed criteria and teachers' own subjective perceptions were investigated in this study. While there are many different types of mixed-method designs (e.g., see Leech & Onwuegbuzie, 2007) they are usually shaped by requirements related to timing and the emphasis the researcher attaches to the quantitative and qualitative parts of the design

(Molina-Azorin, 2016). Although the quantitative and qualitative components were valued equally, their timing was of particular importance in this study. Thus, the sequential, threephase mixed-methods design outlined earlier was adopted (e.g., see Cresswell, 2014; Shannon-Baker, 2016; Teddlie & Tashakari, 2009).

The study's design and instruments were determined by the research questions, type of data required to answer them, and the research strategy of the Taylor et al. (2015) evaluation that the research built on. As explained in the introductory chapters, the research benefited from access to both the data collected and instruments used by Taylor et al. to evaluate the FP during its infancy (detailed in Taylor et al., 2016a). Relevant tools and data were therefore incorporated into this study's design to enable comparisons over time to be made. The research objectives were broken down into key research questions, detailed in Figure 3.2 which provides an overview of the essential components of the research design, including the main methods, data sources, and associated sample characteristics and analytical techniques employed in the three central phases of the research. It shows that Phase One drew on a quantitative analysis of pupil attainment outcomes, Phase Two on a survey of FP Lead Practitioners, and Phase Three on qualitative interviews with a sample of teachers working in predominantly socio-economically disadvantaged areas.

The combination of methods used allowed quantitative attainment measures to be complemented by rich process data and afforded the most meaningful insights to be drawn to answer the research questions. The design was sequential so that where necessary, the findings from each phase could lead into the design of the next for further exploration. The results of the first two phases for example were compared with each other to identify any incongruencies between them that required exploration during the interviews in Phase Three. The results of Phase One also helped to inform the sampling for Phase Three (case study schools). While Figures 3.1 and 3.2 suggest a clean linearity to each phase of the research, in reality, the analysis was more synergistic, particularly for Phase Two and Three. The interactive and recursive nature of this design, intentional 'conversations' among the data sets from different methods and time points, and motivation to identify and pursue unexpected and contradictory results to achieve deeper insight, aligned with a dialectical orientation (e.g., see Greene & Hall, 2010; Johnson & Schoonenboom, 2016).

Figure 3.2: Overview of Research Design and Data

	1			1	
Phase		Phase One	Phase Two		Phase Three
Кеу		How has pupil attainment	How do teacher		How do teacher
Questions		in the FP changed	interpretations of the FP		interpretations of the FP
		between 2011/12 and	relate to attainment, other		relate to attainment, other
		2016/17?	educational outcomes, and		educational outcomes, and
			perceptions of equity?		perceptions of equity?
		To what extent has the FP			
		mitigated the impact of	How have they changed		How is enactment of the FP
		poverty on pupil	during the study period?		related to measured
		outcomes during this			outcomes during this
		period?			period?
Data		Administrative Pupil	Online Survey of FP Lead		Teacher and headteacher
Source/		characteristic and outcome	Practitioners		semi-structured Interviews
Method		Data			
Sample		All 2011/12 - 2016/17 Year	All schools in Wales with		3 headteachers
		2 pupils in Wales. Cohorts	known email addresses were		8 FP Lead Practitioners
		ranged from 32,751 to	approached (N=1,221).		10 FP classroom teachers
		35,271 pupils and schools	A total of 289 Lead		Drawn from 7 schools
		from 1,366 to 1,290 during	Practitioners participated.		
		this period.	Response rate = 24%		
Analysis		Quantitative	Quantitative		Qualitative
Technique		Inferential and	Descriptive statistics		Thematic Analysis
		Descriptive statistics			

The sequential design also helped to address the 'integration challenge,' a sign of quality in mixed-methods research (Fetters & Freshwater, 2015, p.204). In a fully integrated mixed-methods approach, qualitative and quantitative data are integrated in meaningful ways throughout the phases of the research process, from the framing of the research questions to data collection, sampling, analysis and in the process of drawing conclusions (e.g., see Creamer, 2016, 2018). This helps to ensure that the sum result is greater than would be achieved by the individual qualitative and quantitative parts (Fetters & Freshwater, 2015). The design of this study, including the synergistic analysis and interpretation of findings was key to integration. However, different phases of the research varied in their conceptualisation of poverty and poverty-based gaps, and it is important to address this before describing each phase.

Conceptualising poverty-based gaps in the thesis

The preceding chapters have explained that learners from disadvantaged backgrounds are broadly conceived in the study as children from families who are likely to experience detrimental circumstances related to poverty. However, a rationale is provided for the use of
eligibility for Free School Meals (FSM) as a proxy measure for these children when analysing pupil attainment data from Phase One. While this represents a narrower group of children, the approach was dictated by the way that administrative data is collected in Wales and relates to explicit goals within the FP and the way that Welsh Government assess gaps between learners related to socio-economic disadvantage. Furthermore, even though FSM eligibility fails to capture all children impacted by poverty (e.g., see Gorard, 2012; Taylor, 2018), it is commonly used by researchers as a proxy for low parental income in attainment gap studies and is framed as a useful and reliable indicator of low socioeconomic status by academics (e.g., see Gorard, 2012; Illie et al., 2017; Taylor, 2018).

However, while 'poverty-based gaps' are referred to throughout the thesis, they do not always relate to FSM eligibility. In Chapter Four's analysis of attainment data they are more narrowly defined in this way but as the study recognises the limitations of eFSM as a proxy measure within administrative data it tries to capture a broader understanding in the rest of the thesis. In both the survey and interviews (Phase Two and Three), references are made to 'children affected by poverty' or 'children from disadvantaged backgrounds' without specific definition which is therefore open to the subjective interpretations of participants. This allows for broader groups of children to be considered which is important from a social justice perspective. Indeed, one practitioner claimed she did not believe FSM was a representative indicator of children affected by poverty in her school, which suggests that teachers may have broader groups of children in mind when they are referring to povertybased gaps between learners. However, for the sake of consistency and readability, the same phrase is used throughout the thesis. The next sections discuss the rationale, data and respective collection procedures for each phase of the research, starting with Phase One, where the focus is on measured attainment data.

3.3 Phase One: Investigating measured attainment and attainment gaps

The introductory chapters highlighted that by as young as seven, socioeconomic gaps on standardised assessments could predict later academic performance and that reducing such gaps in the preschool years may help narrow later attainment differences (Magnuson et al, 2016; Ofsted, 2014). This contributed to the rationale for focusing on measured attainment outcomes and is extended in this section to the use of administrative attainment data, discussed next.

Rationale for using administrative data

To examine the extent to which progressive reforms impact outcomes in the early-years and mitigate the impact of poverty on educational disadvantage, two central research questions were addressed. These were firstly, how has pupil attainment in the FP changed between 2011/12 and 2016/17? and secondly, to what extent has the FP mitigated the impact of poverty on pupil outcomes during this period? These questions were broken down into the following series of more precise questions, to guide this first phase of the research:

- How has pupil attainment in the FP changed between 2011/12 and 2016/17?
- How has measured attainment changed over time?
- How has measured attainment for pupils eligible for Free School Meals (FSM) changed?
- How have poverty related attainment gaps changed?
- How does measured attainment vary between schools?
- How does measured attainment for pupils eligible for FSM vary between schools?
- How do measured attainment gaps vary between schools?
- How does progress towards narrowing gaps vary between schools?
- How has measured attainment, particularly for disadvantaged learners, changed in case study schools?
- To what extent does poverty influence outcomes when controlling for other variables?
- How has this influence changed over time?

Researchers argue that the best way to examine attainment differentials is to compare groups quantitatively which can then help guide more in-depth qualitative work (e.g., see Connolly, 2008). The use of attainment data, usually obtained for the operation of an administrative system (Elias, 2014), offered a number of recognised advantages here. These included their frequently longitudinal nature, sample size (often a whole population) and the opportunity to consider large population subgroups (Connolly et al., 2016; Card et al, 2010). As attainment data are commonly used to study attainment differentials (e.g., Gorard, 2018; Gorard et al., 2022; Strand, 2010, 2014) they were a natural source of data for this phase of the study. Additional benefits offered by the administrative datasets used were that they were considered robust (they are employed by the Welsh education system to evaluate itself), collected annually by Welsh Government for all Year 2 pupils in Wales, and were available for six consecutive years from the start of the FP. This allowed trends over time to be examined. A variety of subgroups could also be identified, such as pupils likely to be from families impacted by poverty, as well as other relevant characteristics such as gender and ethnicity. These are sensitive data that would be difficult to obtain otherwise but are important factors to consider in studies of differential attainment (Martino & Rezai-Rashti, 2013; Strand, 2014).

Description of the administrative data and how levels of attainment were derived

The data were derived from teacher summative assessments of pupil development in a range of subjects at the end of Year 2. Grades relate to a perceived level of development based on criteria or 'skills ladders' set out in the curriculum documentation (see Welsh Government, 2015b; 2017b). Teachers use a range of evidence over time including observations and formative assessments, providing a holistic view of a range of skills.

Development is graded from working towards Outcome 1 to Exceptional Achievement above Outcome 6. When these assessments are recorded, children are either six years old or most likely, seven. Outcome 5 reflects the level of development that is broadly aligned with what is 'expected' of a child aged six-seven years, while Outcome 6 aligns with the expected level of development for a seven-to-eight-year-old (Welsh Government, 2017b). These are the two variables of interest in the analyses.

The data pertains to a whole population: all Year 2 cohorts in Wales from 2011/12 to 2016/17. These were all the years for which FP outcome data were held when the data request to Welsh Government was made. The data were drawn from two existing Welsh

Government sources: the National Pupil Database (NPD) and Pupil Level Annual School Census (PLASC). These included attainment data, individual pupil level characteristics and information related to each school and its cohorts. A summary of the variables integral to the analyses is provided in Table 3.1, while Table 3.2 illustrates the Year 2 cohort characteristics for the study period.

Pupil Characteristics	Pupil Attainment Outcomes	School Level Variables				
for all pupils in each Year 2 cohort	for each pupil in each cohort	linked to each pupil in each cohort				
between 2011/12 and 2016/17	between 2011/12 and 2016/17	between 2011/12 and 2016/17				
Pupil identifier (anonymised)	Pupil identifier (anonymised)	Unique School ID code				
Gender	Mathematical Development	(anonymised)				
Ethnicity	Language Literacy and	% Eligible for FSM in Year 2 cohort				
FSM eligibility	Communication	% With SEN in Year 2 cohort				
SEN status	Personal and Social Development,	% Not White British in Year 2 cohort				
	Wellbeing and Cultural Diversity	% Male in Year 2 cohort				

	Table 3.1:	Variables in	the	dataset
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	Table 3.2	: Cohort	characte	eristics
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		2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Schools	n	1,366	1,344	1,332	1,318	1,309	1,290
Pupils	n	32,751	33,174	33,954	35,564	34,734	35,271
FSM pupils	n	6, 975	7,090	6,935	7,228	6,856	6,691
	%	21.3	21.4	20.4	20.3	19.7	19
not-eFSM pupils	n	25,776	26,084	27,019	28,336	27,878	28,580
	%	78.7	78.6	79.6	79.7	80.3	81
Males	n	16,835	169,79	17,364	18,198	17,793	18,067
	%	51.4	51.2	51.1	51.2	51.2	51.2
Females	n	15,916	161,95	16,590	17,336	16,941	17,204
	%	48.6	48.8	48.9	48.8	48.8	48.8
SEN pupils	n	8,371	8,363	8,347	8,667	8,419	8,427
	%	25.6	25.2	24.6	24.4	24.2	23.9
Non-SEN pupils	n	24,380	24,811	25,067	26,887	26,315	26,844
	%	74,4	74.8	75.4	75.6	75.8	76.1
Non-White pupils	n %	2,505	2,579	2,656	2,868	2,992	3,073
White British Pupils	n	30,126	30,515	31,232	32,654	31,690	32,136
	%	92.3	92.2	92.2	91.9	91.2	91.3

3.4 Phase Two and Three: Investigating practitioner perceptions and enactment

The second and third phases of the research are classed as two separate phases since the preliminary analysis of Phase Two helped inform the design of Phase Three. However, in this section they are described together since they addressed the same research objective, to

explore practitioner perceptions and enactment of the FP, particularly with respect to disadvantaged learners. The section begins by outlining the amended design of Phase Three, as the research strategy changed due to the COVID-19 pandemic.

Originally, practitioner perceptions and enactment were to be explored through classroom observations and practitioner interviews in a couple of case study schools. The observational element mirrored the Taylor et al., (2015) evaluation that the research built upon. It also addressed concerns outlined in the literature to account for the way reforms are enacted when evaluating their success and some of the known weaknesses of relying on teacher reports of their enactment (e.g., see Boonen et al, 2014). When the pandemic struck, the observations were about to begin. School closures, followed by initial governmental reluctance and then that of LEAs once schools re-opened prevented non-essential visitor access to settings and therefore the observations taking place (please see Appendix C for further details). While this did not impact Phase Two (the survey), it did impact the design of Phase Three, resulting in an expansion of the number of case study schools and practitioners interviewed.

Similar to Phase One, a set of specific questions were developed for Phase Two and Three to increase the study's precision and ability to address the second research objective. Table 3.3 shows the sources of data used to answer each question, illustrating that sometimes both survey and interview data were used, but not always. The respective merits and complementary strengths of survey and interview methods made them ideal instruments to employ. Structured surveys are an inexpensive means of targeting a large population and have the potential to gather large amounts of data with greater inferential power compared with interviews (e.g., see Bryman, 2008, Scott & Usher, 2011). The ability to anonymise them is beneficial too in terms of maximising participation rates and minimising response bias common in social research. This makes it easier for respondents to be honest about practice and critical of policy. Data derived from a larger, more diverse sample also had a greater chance of detecting a wider range of opinion and practice. This was important given the findings of the literature review and Phase One of the research. In addition, to compare change over time, repeating elements of Taylor et al.'s survey which obtained data from a large sample was particularly important (see Taylor et al., 2016a).

Table 3.3: Research Questions investigated in Phase Two and Three

How do teacher interpretations of the FP relate to attainment, other educational outcomes, and							
perceptions of equity?							
How do teachers enact the FP in the classroom? Survey & interview data							
 How does enactment relate to perceptions of equity? 	Interview data						
• What are teacher perspectives of the benefits and impact of the FP?	Survey & interview data						
 How do teacher perspectives of the benefits of the FP for 							
disadvantaged learners relate to measured attainment outcomes?	Survey & Interview data						
How do teacher perspectives of the benefits of the FP for							
disadvantaged learners relate to perceptions of equity?	Interview data						
How have perspectives changed during the study period?							
• How have perspectives of the benefits changed over time?	Survey data						
 How have perspectives of impact changed over time? 	Survey data						
How have perspectives of equity changed over time? Survey data							
How is enactment of the FP related to measured outcomes during this period?							
 How do schools vary in their enactment of the FP? 	Survey & Interview data						
 How has enactment changed over time? 	Survey & Interview data						

In contrast, the advantage offered by the seven case studies and interview component included the ability to delve deeper into the patterns identified in the survey and Phase One and draw on the rich case study data obtained by Taylor et al., (2015). This enabled a more comprehensive understanding of the data, helping to obtain deeper insights into the thoughts, opinions, and experiences of FP teachers. Drawing on the case studies of schools in disadvantaged areas also helped to facilitate a more nuanced understanding of the policy's enactment and impact with respect to learners from disadvantaged backgrounds. Furthermore, a known strength of interviews is their ability to elicit richer data than structured surveys. This combined approach then aimed to attain a more comprehensive understanding of the research topic and align with research literature recommendations. The sampling and data collection procedures are described next, starting with the Lead Practitioner survey.

Phase Two: National Foundation Phase Lead Practitioner Survey

The survey used a structured closed question format and elicited predominantly ordinal data using Likert scales (see Appendix D). Because it was designed to capture practitioner opinion about the policy including its impact on areas of schooling and groups of learners and explore how opinion had changed over time, many of the questions were repeats of the survey questions used by Taylor et al., (2016a). This allowed direct comparisons to be made between the two survey time points. However, the findings of the first phase of this research led to the inclusion of a number of additional questions to gain a measure of enactment, variation, and difficulty experienced implementing the programme as designed. These additional questions were derived from the descriptions of the pedagogical principles in the policy documentation (see Appendix E).

It was important to make participation as simple and convenient as possible in order to maximise response rates. Therefore, the research took advantage of Qualtrics, an online survey tool with a proven ability to collect high quality data for social research (Douglas et al., 2023). This allowed practitioners to complete the survey anonymously, on a smartphone or computer at their convenience. The survey was piloted among peers and following feedback, FP practitioners known to the researcher were recruited to participate in a further pilot. Comments were invited regarding wording, comprehension and design, and the survey was amended accordingly. The four regional educational Consortia were approached for the e-mail addresses of all schools with FP provision in their area. This was a lengthy process but important to enable all schools to be targeted, negating the need for a sampling strategy. A bilingual email was sent to headteachers in March 2019 (Appendix D), containing information about the research, an invitation to take part and the survey link (which could be conducted in Welsh or English). A reminder email was distributed four weeks after the first, and by the close of the survey, 289 responses from FP Lead Practitioners were received. This represented almost a quarter of all schools with responsibility for the FP in Wales.⁸

Phase Three: Practitioner interviews

Phase Three involved semi-structured interviews of headteachers and FP teachers in seven case study schools, all of which had participated in the Taylor et al., (2015) evaluation. The sampling strategy was purposive (see De Vaus, 2013) and was informed by the results of Phase One and Two and Taylor et al.'s research (2015). Unique school ID codes associated with the school NPD/PLASC attainment data for Outcomes 5 and 6 were linked to the Taylor

⁸ The survey requested completion by the member of staff with specific responsibility for the FP or who had 'the most responsibility for its implementation and day to day management'. This could include the Head Teacher, a deputy Head Teacher, FP Lead Practitioner, or another member of staff.

et al., case study dataset. This dataset contained information on pedagogical practice derived from detailed classroom observations undertaken in 2012. Taylor et al., assigned a score to each school indicating how closely aligned practice was with twelve identified pedagogical principles of the FP (see Taylor et al., 2014, 2015, for methodological details). Schools were recruited from a subsample of Taylor et al.'s 41 case studies using multiple selection criteria driven by the research questions.

A range of schools were identified where attainment of pupils from disadvantaged backgrounds had improved, regressed, and remained relatively unchanged during the study period. The sample also represented a range of pedagogical practice in terms of alignment with FP pedagogical principles according to Taylor et al.'s classroom observations in 2012. Using Taylor et al.'s scores of pedagogical alignment (which was effectively a scale representing little alignment to very close alignment), the sampling strategy ensured that schools with high and low scores and some in between were included in the sample. This meant that in 2012, some of the schools were enacting the curriculum as it was intended, while others had not aligned their practice according to the FP's pedagogical design.

The analyses in Phase One also suggested that to increase the robustness of individual school outcome statistics for pupils eligible for FSM, only schools with above average numbers of such pupils should be sampled. Therefore, with one exception, over 20% of pupils were eligible for FSM in the schools selected. Lastly, to limit the weighting effects of small numbers of eligible pupils in smaller schools, only schools with more than five eligible pupils in a cohort were selected. As the quantitative analysis indicated that school size did not have a noticeable impact on pupil outcomes, their lack of inclusion in the sample was not considered a problem. This strategy also meant that teachers were more likely to have had experience of working with learners from disadvantaged backgrounds. The cohort characteristics and attainment details of the selected case study schools are detailed in Appendix Q and summarised in Chapter Six.

Seven schools were identified and respective headteachers invited to participate (Appendix F). During follow up conversations, all headteachers agreed to facilitate interviews with their FP staff and 21 practitioners were interviewed in total. This included three headteachers,

eight FP leads and ten FP class teachers. Interviews lasted an average of an hour and were conducted remotely in 2020. The semi-structured approach ensured that key questions were asked of all respondents whilst allowing the researcher the flexibility to ensure they were understood and potentially, similarly interpreted, and to follow up on particular responses that appeared especially insightful.

The schedule itself was designed to explore how teacher interpretations of the FP related to attainment, other educational outcomes, and perceptions of equity, while providing space to explore patterns and contradictions identified earlier in the research that warranted further investigation. Key questions concerned how teachers enacted the FP and perceived it impacted and benefited disadvantaged learners. They also concerned changes in practice over the study period to explore how enactment related to measured attainment outcomes in each school. A number of prompts were developed to help guide the discussion for key questions, but most practitioners were very relaxed, naturally elaborative, and forthcoming with information. The schedule was piloted on one headteacher and two FP practitioners known to the researcher, and one headteacher and one FP Lead practitioner the researcher had approached to pilot the observation tools intended to be used in the pre-COVID design. The final interview schedule detailing the key questions forms Appendix G, while information for participants forms Appendix H. This included a link to a project website which was developed to provide further information about the research for participants or other interested parties and a contact form for questions or feedback (see https://5f7b79407f5e3.site123.me).

3.5 Analytical approach and procedures

This section outlines how the analytic approach addressed the research questions. Although it is outlined sequentially for each phase of the research, as suggested earlier a more integrative approach was taken to the overall analysis of the results and drawing of conclusions. For example, the survey data were analysed before the interviews were conducted, which helped shape the interview questions, but the insights gained from the interviews helped to make better sense of and improve the understanding and interpretation of survey findings. Indeed, it is advised that data derived from mixed-methods should be mutually illuminating (Bryman, 2014) and this was achieved by the joint consideration of results.

Phase One: Analysis of administrative attainment data

The format and structure of the data were not under the researcher's control and some of the known challenges of using administrative data such as their frequent messiness, complex nature and need for considerable cleaning and recoding were experienced before the analysis could begin (e.g., see Connelly et al., 2016). Analysis focused on the attainment at Outcome 5 and 6 to capture all ages and expected and higher levels of attainment. Including Outcome 6 was also important because most pupils achieve Outcome 5. This approach also responded to criticisms related to focusing on just one grade level which is said to overly simplify and distort more complex patterns of achievement (e.g., see Connolly, 2008). It also extends the analyses beyond the narrower focus on expected levels in the early research on the FP by Taylor et al. (2015).

Once the data was cleaned and unwanted variables and missing cases removed, pupil attainment was linked to schools using a unique anonymised identifier. This restructuring of the dataset enabled comparisons of attainment at both a school and individual pupil level. Children's attainment in Welsh and English medium schools was combined and ethnicity was recoded to denote 'White British' or 'Not White British' to enable ethnicity to be considered in smaller subgroup analyses. As the specific research questions in Figure 3.2 suggest, the focus of the analysis in Phase One was on looking at changes in measured attainment, attainment gaps and the influence of poverty between 2011/12 and 2016/17. This warranted a quantitative analytical approach, embracing both descriptive and predictive analyses⁹.

Chapter Four provides detailed information on the analytical procedures since these are integral to understanding the results. However, it is worth clarifying the methods used to analyse attainment gaps with reference to the research literature here. Two measures are

⁹ While inferential statistics are used, it must be noted that the data are whole population rather than sample based. Therefore, p values are stated purely for information purposes.

used to reflect attainment gaps using FSM. The first relates to the absolute attainment gap, which represents the raw difference in the percentage of pupils eligible for FSM who achieve an outcome (eFSM) and the percentage of pupils not eligible who achieve it (not-eFSM). The differential simply reflects the percentage point difference in attainment between the two subgroups. As this measure is simple to interpret and commonly used in government reports, it is used in Chapter Four.

However, absolute gaps do not account for the size of the percentages being compared or how close two subgroup values or percentages are in relation to a larger total value such as the total number of pupils attaining an outcome. This is particularly important when comparing changes in gaps over time (see Gorard, 2000 or Smith, 2005 for a detailed discussion of these issues). Some argue that a better way of analysing such data is to look at the attainment of different groups of learners relative to the total number of pupils who achieve a particular level (Gorard, 1999, 2000). Here, a relative gap in achievement is understood as the difference in attainment at a particular level between two groups of pupils, divided by the number of pupils overall who achieve a particular level of attainment. This approach is useful for providing a more nuanced understanding of gaps between learners and the rate of progress towards narrowing them. Therefore, in Chapter Four, the relative gap refers to the number of pupils eligible for FSM who achieve a given outcome, compared with the number not eligible who achieve it, relative to the total number of pupils achieving the outcome altogether. The formula used to calculate this gap was (eFSM - noteFSM) / (eFSM + not-eFSM) * 100, where 'FSM' and 'not-eFSM' relate to the % of pupils in each subgroup achieving the outcome.

Phase Two: Survey data analysis

The initial survey analysis was quantitative and proceeded in a largely descriptive manner. As the survey was concerned with gathering a general picture of opinion and enactment, the analysis predominantly drew on frequency counts. While Likert scales were used to indicate strength of opinion, the limitations of standardised questioning in survey research in their assumption that respondents interpret questions in the same way are recognised. Where associations between survey responses are examined (such as how easy practitioners felt it

was to engage with the pedagogies and the extent to which they were embedded), the chapter reports the correlation coefficients using Spearman's Rho. When analysing changes in perspectives over time, simple comparisons of response frequencies in 2012 and 2019 were used, comparing the data from Taylor et al.'s study with the data from this research, to see if the general picture had changed.

Phase Three: Interview data analysis

In contrast, the analysis of interview data required a qualitative approach. I began by listening to the audio recordings multiple times, transcribing them in full to preserve the whole narrative, before closely reading each transcript. This process of data immersion was intended to maximise my familiarity with the data and avoid inaccuracies and data loss. Familiarizing oneself with the entirety of the data prior to coding and note taking provides a valuable orientation to the raw data and a foundation for all subsequent analytical steps (Kiger & Varpio, 2020). Practitioners were assigned pseudonyms based on Christian names that felt meaningful and memorable. This was done to retain data closeness and these pseudonyms are used for reporting the findings.

Initial notes and ideas about the discussions were made prior to a more structured thematic analysis. This broadly followed the guidelines of Braun and Clarke (2006, 2020) and utilised NVIVO qualitative analysis software. The analysis was reflexive moving between an inductive and deductive approach (e.g., see Braun & Clarke, 2020), guided both by the research questions, themes in the research literature and observations made during the analysis. Initially, a wide number of codes were generated as each transcript was read and coded multiple times, but these were continually reduced and refined, as recommended in the methodological literature (e.g., see Guest et al., 2012; Braun & Clarke, 2020). Analytical observations mapped onto key themes identified in the enactment literature, which were useful for making sense of how teachers interpreted and translated the FP in practice. These themes related to the professional, situational, external and material contexts of practice, hence an enactment perspective drawing on the work of Braun et al., (2011) is used to frame the reporting of the analysis in Chapter Six. Neither the particular school nor teacher status/role appeared to have a bearing on practitioner narratives, so they do not feature heavily in the discussion of the findings.

The analysis eventually focused on the themes and codes that contributed most to answering the research questions. An example of how themes were generated from coded extracts forms Appendix I, which looks at how teachers interpret the beneficial outcomes of the FP.

3.6 Ethical and Reflexive Considerations

Being reflexive as a researcher is key to establishing quality and rigor (Berger, 2013; Creswell & Miller, 2000). Researchers should be reflexive about the limitations of their research, including any biases, assumptions, or gaps in the data and acknowledge their implications for the research findings (Probst, 2015; Wilson et al., 2022). A conscious effort was made to be reflexive throughout the research and this section discusses some reflexive considerations, such as my positionality, adaptations made to the research design, and some of the study's limitations. The section begins by reflecting on ethical considerations.

Ethical considerations and procedures

Ethical approval was secured from Cardiff University's School of Social Sciences Ethics Committee for each phase of the research (see Appendix A). Ethical approval was obtained in August 2018 for Phase One, February 2019 for Phase Two, and December 2019 for Phase Three. Procedures were put in place in accordance with these agreements and adhered to throughout the research. The study was also conducted in accordance with the British Educational Research Association's Ethical Guidelines for Educational Research (BERA, 2018). Key considerations relate to anonymity, confidentiality, and data security. In order to protect the privacy of all participants (including pupils in the administrative data, survey, and interview participants), it was important to ensure they were not identifiable from the research. This section describes the measures taken, together with the efforts to be transparent about the research process, attain informed consent and keep data secure and protect it from unauthorised access. Establishing measures to protect the anonymity of both pupils, participants and schools was central to all ethics applications and the data request to Welsh Government (Appendix B). Additional safeguarding measures were also implemented resulting from the introduction of GDPR (2018). Measures included the safe storage of all data on Cardiff University's secure Network which is username, password protected and complies with the requirements of the Cyber Essentials Scheme. Pupil and school names in the administrative dataset were suppressed and individual pupils not identifiable. As much of the interview data did concern identifiable information (school and practitioner names), pseudonyms were generated early on and replaced original names in all data files. Although some basic contextual data is used to describe the schools, there is insufficient detail to identify schools or teachers from this. The survey did not request any identifiable information and all responses were anonymous. All data files were password protected, access was restricted to the researcher and supervisors and no hard copies of the data were made. I am confident participant anonymity was not compromised and no data protection issues arose during the study.

Other key considerations in Phase Two and Three concerned voluntary informed consent, the right to withdraw and minimising losses that might stem from participating in the research. Prior to taking part, both survey and interview participants were given a summary of the research, its aims, and objectives and how the information they provided would be used. Survey respondents were informed that by completing the questionnaire they were providing their consent to take part. Interview respondents signed and returned a consent form prior to participation, which included an option to consent to audio recording (sample consent forms and information letters form Appendix H). Verbal consent was also obtained at the start of each interview, where participants were again provided with assurances of confidentiality and the ability to withdraw and stop the audio-recording at any point. No participants asked to withdraw from any element of the research. Efforts were made throughout the research to make participants feel valued. All interviews ended warmly, and respondents appeared pleased to have helped and sorry I couldn't visit in person. I sent messages of gratitude after the interviews and later, Christmas greetings.

Positionality

To understand my position as researcher in the study, it is important to acknowledge the role that my previous experience, understanding and knowledge may have played in the research process, from the selection of the research questions to the interpretation of my findings (see Becker, 1988; May & Perry, 2011; OíReilly, 2009). For example, my educational experience as a child impacted by poverty and subsequent awareness of the differences in opportunities, expectations and attainment between my school and its more affluent neighbour, directly shaped the appeal of the study and selection of research questions. However, when I was analysing the qualitative data, I was aware of assumptions I had from my education, my experience as a primary school governor, and a parent who had seen one child through the FP and another through the previous curriculum. These assumptions required challenging. I could not assume for instance that the impact of socio-economic disadvantage on my education and attainment was the same as that for children in the FP, especially since the curriculum that I was exposed to was not underpinned by the same assumptions or principles. As a school governor I was keen to monitor disparities in measured attainment in key curriculum areas in the FP, and like my colleagues, viewed them as the most important outcomes for learners. However, during the course of the research I realised that my role as a governor perhaps blinded me to some of the wider outcomes of the FP and have challenged this view and acknowledged it represents a limited understanding of achievement in the FP.

The research challenged my assumptions and expectations in other ways too. The pedagogical approach of the FP compared to its predecessor closely resonated with not only my own ideas about how children learn, but also how I parented my children. My son who went through the FP was able to build on all the rich experiences I provided for him out of school, but his childhood was not impacted by socio-economic disadvantage. The combination of the assumptions I had made led to what I realised were naively positive expectations about the FP and its potential to narrow attainment gaps at the start of the research. Although I had significant experience in FP classrooms, this was not in schools serving particularly deprived areas, so I had to put aside any assumptions I made from this. It

was only when I began piloting the observation schedule in classrooms in disadvantaged areas as part of the pre-pandemic research design, that I was able to witness some of the particular challenges of implementation and therefore potentially, the limitations of this type of curriculum for pupils impacted by disadvantage.

I attempted to be reflexive about these issues throughout the research process and did not dismiss my influence on the selection of research questions, data collection and interpretation of findings. I attempted to ensure all research instruments were neutral and while it is hoped the thesis offers some useful insights, it is acknowledged that what is presented reflects my individual interpretations of the data. I was however respectful of diverse viewpoints and ways of knowing, including the different ways in which teachers perceive disadvantage and the boundaries of poverty, and therefore the conceptualisation of gaps between learners. Indeed, the lack of a clear definition of poverty and gaps between learners was problematic in the sense that this leads people to interpret them in different ways. I was therefore mindful of this in my interpretation of the findings.

Reflections on the impact of COVID

As described earlier, the COVID-19 pandemic had a significant impact on the research design, which was adapted when in-person access to schools was prevented. This meant that the observational element of the study was lost. The original orientation towards classroom observations was derived from Taylor et al.'s (2015) evaluation. It aimed to compare practice over time using Taylor et al.'s data and observational method which would provide a more detailed picture of how the FP was enacted in a small number of schools. However, on reflection, the adapted design which was based on expanding the number of case studies and the number and length of interviews, appeared to offer significant benefits. For instance, while it is acknowledged that direct classroom observations may have offered more nuanced insights into the extent practice aligned with the intended curriculum as well as differences between schools, they would not have captured the range and depth of reflective insight into practitioners' views of their practice, the policy's impact and particularly, issues related to learners from disadvantaged backgrounds. This was central to the ability to answer the research questions and resulted from extending the number and length of interviews.

Furthermore, the administrative data suggested that there were widespread differences in progress towards closing gaps and combined with the survey data, suggested that there may be differences in the way the FP was enacted. The larger sample of case-studies and interviews afforded by the redesign of the research allowed this to be investigated by including schools that represented a broader range of initial practice and also, patterns of attainment and progress towards closing gaps between learners over time. However, it is acknowledged that the delay to conducting the case study component of the research meant that the interviews and descriptions of practice (undertaken in 2020) were further away from the administrative data period (2011/12 to 2016/17) so some of the conclusions drawn rely on teacher accounts of past practice. While it is acknowledged that this is a potential weakness of the study, it was not possible to mitigate for the impact of the pandemic on the timing of the research. Appendix C explains the decision-making process.

Limitations

The potential limitations of individual components of the research design such as surveys are well documented (e.g., De Vaus, 2013; Gorard, 2001) and this research was mindful to minimise these through careful design and piloting of all instruments. With respect to the lack of classroom observations, it is acknowledged that data from teacher surveys may result in less refined or more distal measurements of practice since teachers might not be reliable informants of what they do (e.g., see Boonen et al., 2014; Guarnino et al., 2006). Therefore, in the absence of classroom observations, more emphasis was placed on detecting general patterns rather than individual detailed accounts. It is also acknowledged that teacher surveys can be sensitive to social desirability response bias, halo effects, and other biases resulting from positive, negative, or acquiescent response styles (Muijs, 2006) and there is a risk that respondents may be unlikely to express opinions that deviate from national policies in social research. However, many teachers openly reported less aligned practice and were critical of certain elements of the policy in the surveys and interviews. Attempts were made to mitigate for any such biases through the way questions were phrased both in the surveys and interviews, and I remained mindful of these issues when conducting the research and during the analytical process. Furthermore, one of the strengths of this study was its ability to

draw on Taylor et al.'s robust research tools, including a survey designed for similar purposes (see 2016a).

Some may criticise the study's focus on administrative attainment data in the three core curriculum areas, a focus that many proponents of progressive approaches deride (see previous chapter). The risk here is that the research misses the impact of the FP on other valuable outcomes. A trade-off had to be made between using readily available data for a whole population or potentially, focusing on other outcomes for which data wasn't available or consistently collected across schools. Given the ability to obtain a national picture of attainment for outcomes that the policy intended to impact, in addition to the rationale provided in section 3.3, the decision to use administrative attainment data seemed justified. Moreover, a further strength of the study was its mixed-methods design, which aimed to address this potential criticism and minimise some of the limitations associated with individual methods. Indeed, mixed-methods approaches are framed as potentially offsetting the weaknesses associated with qualitative and quantitative methods when used by themselves and instead draw on the strengths of both (e.g., see Bryman, 2006). In the context of this thesis, the adoption of the mixed-methods approach meant that other impacts of the curriculum could be assessed, firstly on a large scale through the Lead Practitioner survey, and then on a smaller, but more-qualitative scale, through the case study interviews. The different sources of data derived from the different methods in this research are presented as equally valid since they capture different interpretations of outcomes. This is considered to be a strength of the study.

Some limitations to the quantitative analyses in this research could not be overcome and therefore limited the conclusions drawn. Analyses were only able to demonstrate trends over time rather than causal effects as a comparison group of pupils or schools not subject to the FP did not exist. They were also unable to account for the impact of other initiatives on attainment gaps such as the Pupil Development Grant (PDG) which was implemented during the study period, although the PDG evaluation report (Pye et al., 2017) found that most schools focused their spending on low-attaining disadvantaged pupils, and this is considered alongside the results in Chapter Four. The rationale for using FSM as an indicator of poverty was provided in section 3.2 whilst acknowledging that the measure fails to capture all

children impacted by socio-economic disadvantage. These concerns are also partly mitigated for by incorporating practitioner perspectives in the research who appear to have broader conceptualisations of pupils affected by poverty.

Finally, it is worth discussing the generalisability of the research findings. While the ability to generalise to wider populations from qualitative interviews undertaken in seven case studies is inevitably limited (e.g., see Cresswell, 2014; Denzin & Lincoln, 2018; Scott & Usher, 2011), this was not the purpose of the case-study component of the research. Instead, they served to offer contextual understanding and detailed insights about the enactment and impact of the FP in schools serving deprived areas. As the FP Lead survey targeted all schools nationally and the pupil attainment data concerns a whole population, the trade-off between detail and ability to generalise from the case study element of the research was worthwhile. However, while the research may offer useful insights for populations beyond Wales, the findings of the study are specific to the context of the FP and cannot be widely generalised.

3.7 Conclusion

This chapter has provided a detailed overview of the methodological approach and design of the study. The aim was to provide transparency in the research and justify and reflect upon the way the research was conducted and conclusions reached. It has described how a range of methods have been employed following a sequential mixed-methods design to better understand the complex topic of curriculum evaluation and address the research questions of the thesis. The chapter has also discussed the assumptions underlying the study and the positionality of the researcher whilst outlining some of the study's limitations in an attempt to provide a trustworthy and honest account of the research. Similar to the structure of this chapter, the following three chapters will provide an in-depth discursive analysis of the empirical results, ordered by the three-phased sequential research design.

Chapter Four: Pupil attainment and the influence of poverty in the Foundation Phase

4.1 Introduction

This chapter investigates the impact of the Foundation Phase (FP) on pupil outcomes derived from teacher assessments at the end of Year 2, building on the Taylor et al. (2015) evaluation conducted when the programme was still in its infancy. This later research gave the FP longer to embed, providing more time for practitioners to develop a deeper understanding of this curriculum and its pedagogical principles, before assessing its impact. This means there was a greater chance that the FP was being enacted as designed, and hopefully therefore, of the programme realising its aims. As explained in the introductory chapters, while it is acknowledged that attainment is only one outcome of the FP identified in the policy documentation (Maynard et al., 2012), it is important to assess the extent to which Welsh Government's ambitions to raise attainment, especially for children from disadvantaged backgrounds and narrow gaps between learners had been achieved (see Welsh Government, 2016a).

This research is especially interested in the impact of the programme on children from disadvantaged backgrounds and particular attention is given to poverty-related attainment in the chapter. This focus is framed within a wider national concern to reduce attainment gaps, as described in Chapter One. Narrowing gaps between learners is a central goal of the country's 'national mission' (Welsh Government, 2017a), an explicit objective of the *Foundation Phase Action Plan* (Welsh Government, 2016a), and a principle for action set out in *The Learning Country* (NAfW, 2001). Early research suggested that the ambition of mitigating the impact of poverty on achievement in the FP was not being realised (e.g., see Davies et al., 2013; Power et al., 2019). Furthermore, Power et al. (2019) suggested that pupils from deprived backgrounds stood to gain less in terms of measured attainment than their more advantaged peers. However, as the FP was still in the early stages of implementation at the time of Power et al.'s conclusions, it is important to explore its impact now that significant time has passed.

This first empirical chapter then, examines how attainment has changed over a six-year period from policy roll out in 2011/2012 to the year ending 2016/17. It addresses the first research objective: to examine the extent to which the FP has impacted attainment in the early-years and mitigated the impact of poverty on pupil outcomes. Analyses are based on outcome data derived from the National Pupil Database and Pupil Level Annual School Census for all Year 2 FP cohorts during this time and eligibility for free school meals (FSM) is employed as an indicator of poverty¹⁰ (See Chapter Three for further details). The chapter begins by examining pupil attainment and attainment gaps in the curriculum's three core subjects over the study period. This leads to a consideration of poverty's influence on attainment and how it has changed, and the progress made towards reducing inequalities in attainment during the study period. A series of school-level analyses follow, exploring the extent to which patterns revealed at the national pupil-level are shared by schools across Wales. Variation in pupil outcomes between schools is examined, together with changes in attainment, and progress towards narrowing gaps between learners. The chapter then explores whether attainment might be related to enactment, according to the degree to which schools embraced FP pedagogies using an implementation score awarded to each case study school in the research by Taylor et al., (2015). Finally, the chapter concludes with a summary of the main findings.

4.2 National Pupil Level Results

The analyses are based on national pupil attainment for the three core outcomes of the FP:

- Mathematical Development (MDT)
- Language, Literacy and Communication Skills (LLC)
- Personal and Social Development, Well-Being and Cultural Diversity (PSD)¹¹

These outcomes were selected as they represent what are positioned as the 'core' outcomes of the FP in the policy documentation. Together, the core outcomes contribute towards a

¹⁰ 'eFSM pupils' is used to denote all pupils who are eligible to receive free school meals according to school administrative records. This means that they have successfully applied for free school meals and the category therefore reflects take up. 'not-eFSM' simply indicates all other pupils.

¹¹ Whilst results are presented for PSD, owing to initial practitioner uncertainty and confusion over the assessment of the subject (at least anecdotally), it does not feature significantly in discussions. It was felt for example that differences between schools and variations over time may relate as much to changes in the way teachers assessed the subject as to any pupil development in the area.

school's 'Foundation Phase Indicator' (introduced in 2012) which represents the percentage of pupils who achieved at least the expected level (Outcome 5) in all three subjects. These data inform assessments, benchmarking, and the past ranking of schools by regional consortia¹². They are also used by the education inspectorate (Estyn) in their evaluations of schools and by Welsh Government to inform their national statistical attainment profiles for the FP. All pupils have one of eight outcomes or levels of achievement recorded, ranging from working towards Outcome 1 to Exceptional Achievement above Outcome 6. Two other outcomes are recorded for pupils who are disapplied from the curriculum or not graded for reasons other than being disapplied, but this only affects a very small number of pupils in each cohort. The revised framework explains that the FP outcomes set out the 'expected standards' of children's performance (Welsh Government 2015a p.1). The value 'O5+' is used in tables and figures to represent what is commonly referred to as achievement at 'expected levels' (or higher), also called 'Outcome 5+'.¹³ Where reference is made to attainment at higher than expected levels or Outcome 6+ ('O6+'), this refers exclusively to pupils achieving Outcome 6 or higher. Results for Language Literacy and Communication (LLC) have been combined regardless of whether they were taken through the medium of Welsh or English and therefore represent all cohorts in Wales examined in LLC.

The impact of the continued implementation of the Foundation Phase on pupil outcomes

This section demonstrates overall pupil attainment during the study period (including for pupils eligible for FSM) and the attainment of pupils eligible for FSM (eFSM) separately. Considering pupils eligible for FSM as a separate group helps to illustrate how their attainment contrasts with the national picture. Figure 4.1 illustrates a rise in overall pupil attainment in all subjects at Outcome 5+ (O5+), with most pupils in Wales achieving at this level. In 2016/17 for example, 90% of pupils attained MDT at O5+, 89% attained LLC at O5+

¹² There are four regional consortia in Wales who monitor, support and work with schools to raise standards to improve education in their regions.

¹³ The Foundation Phase Profile Handbook (Welsh Government, 2017b) lists the expected age of development that each outcome can be 'broadly aligned' to. Outcome 5 is given as the expected level of achievement for a child of 72–84 months (i.e. six to seven years of age/the age when end of Foundation Phase assessments are undertaken).

and 95% attained PSD at O5+. Although most pupils eligible for FSM also achieve O5+, and there was a rise in their attainment, the overall proportion who attain O5+ remains slightly lower than for all pupils as a whole. Figure 4.2. illustrates that overall, significantly fewer pupils achieve at higher levels of attainment (O6+), despite a continued and notable rise over time. Furthermore, the differences between those entitled to FSM and pupils overall at this level are far more marked. In 2016/17 for example, only 39% of all pupils and 21% of eFSM pupils achieved O6+ MDT, and 38% of all pupils and 19% of eFSM pupils attained O6+ in LLC. The data therefore suggest significant attainment gaps exist in the FP, particularly at Outcome 6+, which warrant further investigation.



Figure 4.1: O5+ Attainment of all pupils and pupils eligible for FSM over time

NB: 'All' refers to the attainment of all pupils and 'eFSM' refers to the attainment of pupils eligible for FSM in each cohort.



Figure 4.2: O6+ Attainment of all pupils and pupils eligible for FSM over time

NB: 'All' refers to the attainment of all pupils and 'eFSM' refers to the attainment of pupils eligible for FSM in each cohort.

Changes in poverty-based attainment gaps under the Foundation Phase

For poverty-based gaps to narrow within this period of overall rising attainment, eFSM attainment must improve faster than not-eFSM attainment. This means that the rise in eFSM attainment depicted above, will not necessarily lead to reduced gaps between learners. The following analyses use absolute and relative differentials to illustrate the attainment gaps between learners based on FSM eligibility. Whilst absolute gaps (reflecting raw or percentage point differences between two percentages commonly used in government reports) are simple to interpret, relative (or proportional) gaps are also used to account for the size of the percentages being compared and consider how close two subgroup values or percentages are in relation to a larger total value. In this research for example, relative differences or gaps refer to the number of pupils eligible for FSM who achieve a given outcome, compared with the number achieving the outcome who are not eligible for FSM (not-eFSM), *relative* to the total number of pupils achieving the outcome. The formula to calculate the relative gap in this chapter is:

(eFSM - not-eFSM) / (eFSM + not-eFSM) * 100

'eFSM' and 'not-eFSM' relate to the % of pupils in each subgroup achieving the outcome. This method is useful for providing a more nuanced understanding of gaps between learners and the rate of progress towards narrowing them over time (see Chapter Three).

Relative and absolute attainment differentials for each cohort in the study period are presented in Figures 4.3 and 4.4. respectively. The Figures illustrate both the size of the gaps between learners based on FSM eligibility in Wales and the extent to which they have changed during the continued implementation of the FP. The results suggest that despite a slight decline in the relative gap over the study period, considerable gaps remain. At O5+ in 2016/17 (the most recent cohort) for instance, the relative gap is 6.9% in MDT, 7.7% in LLC and 3.4% in PSD, in favour of not-eFSM pupils. Only minor progress is observed towards narrowing gaps over time and improvements towards narrowing both relative and absolute gaps at this level appears to have tailed off more recently. In contrast, despite some progress towards narrowing relative gaps at O6+ (again with less progress over the last few years), they remain particularly pronounced at 35.1% in MDT, 37.6% in LLC and 26.5% in PSD in favour of not-eFSM pupils for the most recent cohort. This means that in relative terms at O6+ for example, 38% fewer pupils eligible for FSM achieve LLC than their non-eligible peers. Furthermore, even though the relative gap seems to be smaller by the end of the study period, it is not by enough to reduce the absolute attainment gap at this level which appears to be wider. This seems to suggest that whilst the FP may have made some progress towards narrowing poverty-related attainment gaps at O5+, its effectiveness at narrowing gaps at O6+, at least during the study period, is questionable.



Figure 4.3: Relative gaps at O5+ and O6+ between learners over time

NB: Year is indicated by the degree of shading on each bar: the lightest shading (the first bar on the left) for each outcome represents cohort results for the first year of the study period and the darkest on the right indicates cohort results for the last.



Figure 4.4: Absolute gaps at O5+ and O6+ between learners over time

NB: Year is indicated by the degree of shading on each bar: the lightest shading (the first bar on the left) for each outcome represents cohort results for the first year of the study period and the darkest on the right indicates the last.

Changes in poverty's influence on outcomes when controlling for pupil and school-level characteristics

While the attainment gaps presented above suggest that poverty continues to have a significant impact on pupil outcomes in the FP, they do not account for interactions with other variables such as that between poverty and having special educational needs (SEN). As a significantly higher proportion of eFSM pupils are known to have SEN compared with noteFSM pupils (41% compared with 20% in 2016/2017), the attainment gaps above may in part be reflecting the impact of having SEN on FP outcomes. One way to control for this and the effect of other variables that may influence outcomes, is to employ multivariate techniques. These can offer a more accurate picture of the individual impact of poverty on attainment. Indeed, logistic regression is a useful multivariate method when the dependent variable, such as whether a pupil achieves an outcome or not, is dichotomous (e.g., see Gorard, 2021). Therefore, a series of binary logistic regressions were performed. The resulting models estimate the influence or 'effect' of being eligible for FSM on attaining the three core FP outcomes, by controlling for the influence of several other pupil and school level characteristics (predictor variables). The pupil-level variables included in the analyses are gender, ethnicity, and whether a pupil is eligible for FSM or is known to have SEN. Five school level or contextual variables are also controlled which relate to the composition of the Year 2 cohort within the school attended. These include the size of the Year 2 cohort and the percentage of pupils who are male, eligible for FSM, known to have SEN, and not White British.

The regression models estimate the likelihood of a pupil achieving the outcome of interest, by generating odds ratios (labelled 'OR') using the same predictor variables in each model. The odds ratios of concern in this research indicate the likelihood or probability of a pupil eligible for FSM achieving the outcome of interest, compared with a similar pupil who is not eligible. An OR of less than 1 indicates a reduced likelihood of an FSM eligible pupil achieving the outcome, compared with peers with similar characteristics but not eligible for FSM. Conversely, an OR greater than one indicates an increased likelihood of a pupil eligible for FSM achieving the outcome, compared with similar not-eFSM pupils. As regression models were generated for each outcome during the study period, this equated to six models per cohort, 36 in total for all study years. Table 4.2 presents a summary of the results from these analyses for the most recent (2016/17) cohort, while the results for the remaining cohorts can be found in Appendix J. The odds ratios that represent the likelihood of a pupil eligible for FSM achieving each outcome are highlighted in bold.

The results presented in Table 4.1 suggest that in 2017, after controlling for the other pupil and school-level characteristics described above, poverty was found to exert a considerable influence on all outcomes examined, particularly at higher levels of attainment. For example, the models estimate that a pupil eligible for FSM was 27% less likely to achieve Outcome 5 or higher in MDT and 27% less likely to achieve LLC at this level than a similar pupil not eligible for FSM, after controlling for the other pupil and school-level characteristics (OR = 0.63 p<0.001). Furthermore, at higher levels of attainment in these subjects, the influence of being eligible for FSM appeared even greater. The data suggest that pupils eligible for FSM were 51% less likely to attain MDT O6+ (OR = 0.49 p<0.001) and 56% less likely to achieve LLC O6+ (OR = 0.44 p<0.001) than similar not-eFSM peers.

Whilst the influence of socio-economic circumstances on attainment in the FP appears substantial, it is important to consider whether it has changed over time. If the odds of a pupil eligible for FSM achieving the core outcomes have improved for example, this might suggest that the influence of poverty on attainment in the FP had potentially weakened, possibly as practitioners became more skilled in its implementation. The findings of the 36 models were therefore used to compare the relative influence of being eligible for FSM across the six years of the study period. Essentially, the purpose was to find out whether the odds improved, worsened, or remained relatively unchanged over time. Tables 4.2 and 4.3 present summaries of all the models for each year of the study period using the odds ratios for being eligible for FSM. Table 4.2 summarises the findings for its influence on the core subjects at expected levels or higher (O5+), while Table 4.3 summarises the findings for higher levels only (O6+). Odds ratios in bold indicate that the odds have improved compared with the previous year, while those not in bold indicate that they have worsened.

Binary Logistic Regres	sion:	MDT 05+	MDT O6+	LLC 05+	LLC 06+	PSD O5+	PSD O6+
Valid cases		35,266	35,266	35,266	35,266	35,266	35,266
Missing Cases		5	5	5	5	5	5
Cox & Snell R Square		0.168	0.14	0.188	0.166	0.118	0.226
Nagelkerke R Square		0.359	0.19	0.374	0.226	0.349	0.308
Variable		E	Exp (B) (Odds	Ratios)			
Constant		43.455***	0.749*	39.379***	0.8	431.933***	5.192***
Candan	Female	•					
Gender	Male	1.05	1.222*	0.745***	0.670***	0.552***	0.527***
	not-eFSM						
Free School Meals	FSM	0.633***	0.497***	0.636***	0.447***	0.805***	0.476***
Special Educational	No SEN						
Needs Provision	SEN	0.047***	0.123***	0.050***	0.098***	0.043***	0.117***
Ethnicity	White British		•				
Lunnerty	Not White British	1.011	1.236	0.96	1.179***	0.898	1.015
% of school cohort who are male ¹⁴		0.984***	0.995***	0.986***	1	0.979***	0.993***
% of school cohort who are eligible for FSM		0.988***	0.998***	0.987***	0.989***	0.983***	0.978***
% of school cohort with SEN provision		1.002	1.007***	1.004**	1.006***	0.991***	1.009***
% of school cohort wh	o are White British	1.009***	1.003**	1.008***	1.003**	1.007**	1.003**
School year size		1.009***	1.001	1.009***	1.002**	1.009***	1.003***

Table 4.1: Estimating the likelihood of achieving each outcome in 2016/17

p < 0.05, p < 0.01, p < 0.01, p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.01; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attainment p < 0.001; 05+ includes both Outcome 5 and higher attai

Table 4.2: Summary of the effect of being e-FSM on achievement of core outcomes at O5 over time

	Odds Ratios for the effect of the variable 'eFSM' for each cohort							
Outcome	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17		
MDT O5	0.634	0.601	0.591	0.651	0.612	0.633		
LLC O5	0.573	0.577	0.584	0.624	0.608	0.636		
PSD O5	0.65	0.674	0.655	0.687	0.71	0.805		

P<0.001 for all odds ratios

Table 4.3: Summary of the effect of being e-FSM on achievement of core outcomes at O6 over time

	Odds Ratios for the effect of the variable 'eFSM' for each cohort							
Outcome	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17		
MDT O6	0.51	0.541	0.5	0.488	0.514	0.497		
LLC O6	0.477	0.462	0.474	0.476	0.509	0.447		
PSD O6	0.5	0.523	0.519	0.509	0.502	0.476		

P<0.001 for all odds ratios

¹⁴ Cohort percentage odds ratios relate to the increase in the likelihood of a pupil achieving the outcome associated with a 1% increase in the cohort composition variable, when all other characteristics are equal. For example, a percentage increase in the number pupils eligible for FSM in the Year 2 cohort is associated with a 2% reduction in the likelihood of a pupil achieving MDT O5.
¹⁵ While inferential statistics are used, it must be noted that the data are whole population rather than sample based. Therefore, p values are stated purely for information purposes.

The results summarised in Tables 4.2 and 4.3 demonstrate that the influence of poverty has fluctuated in both directions over time. They suggest that compared with the baseline year (the first shaded column), the influence of poverty at expected levels of MDT remained relatively unchanged at the end of the study period, but for LLC was notably weaker (demonstrated by the odds becoming closer to one). However, for higher levels of attainment (Table 4.3), the results imply that compared to baseline, the influence of poverty remained largely unchanged or slightly greater (demonstrated by the odds moving further away from one). The data suggest then that compared to pupils eligible for FSM in 2011/12, pupils eligible for FSM in 2016/17 appeared to do relatively better at expected levels, and similarly or slightly worse at higher ones (based on how they compared to not-eFSM pupils in each respective year). However, fluctuations in both directions between years are acknowledged and some caution is advised over the interpretation of yearly odds ratio comparisons of different cohorts of pupils. That said, the results do appear to be generally aligned with the overall pattern in the attainment gap data using absolute differences presented earlier.

4.3 National School Level Results

Variation in attainment between schools

From the analyses so far, one cannot tell whether the patterns of pupil attainment and attainment gaps at the national level are universally shared across schools in Wales. It is possible, for instance, that any improvements observed at a national level are a result of substantial progress in some schools (possibly because of the way they enact the FP), while others have made little or no progress at all. Comparing attainment data for individual schools can therefore help to identify how uniform the impact of the programme has been. While research suggests that a significant degree of difference between school outcomes is directly attributable to their pupil intakes and disparities at the start of schooling (e.g., Gorard, 2018), comparing individual schools over time partly addresses this and offers a more nuanced picture of impact during the continued implementation of the policy. It was also useful for determining the basis upon which case study schools should be selected for

further investigation. This section therefore focuses on the variation between schools in pupil attainment, attainment gaps, and the progress made towards narrowing gaps during the continued implementation of the policy.

To perform school-level comparisons, several years of data for each school were combined into two comparison periods. This was because the size of some Year 2 subgroups in schools when examined individually were very small and fluctuated significantly between years. This resulted in a substantial amount of noise. Aggregating data into three-year periods helped to minimise this effect and increase stability in the data. Rolling averages were created for each three consecutive cohorts in the study, using the total number of pupils attaining each outcome divided by the total number of pupils in the three cohorts in each school. For example, eFSM attainment for the earliest period (T_1) is based on the total number of pupils eligible for FSM attaining each outcome within each school in the Year 2 2011/12 to 2013/14 cohorts, divided by the total number of eligible pupils in these three cohorts. The same procedure was used for the later combined period (T₂) using the most recent cohorts from 2014/15 to 2016/17 and for the creation of T_1 and T_2 combined cohort relative attainment gaps. In the following sections, variation in attainment between schools is presented by organising schools into attainment quartiles and comparing upper and lower quartiles using the interquartile range (IQR).¹⁶ This method of comparison was selected to illustrate the extent of variation in outcomes between schools across Wales as simply and clearly as possible. The interquartile range is particularly useful because it is not sensitive to outliers. This is important because in schools that are small or have low numbers of pupils eligible for FSM, the attainment of just a few pupils can significantly influence the results.

Variation in the attainment of pupils eligible for FSM between schools

All schools in Wales were divided into four ranked quartiles based on the proportion of pupils achieving each outcome within them. This process was undertaken for school-level eFSM and not-eFSM attainment separately and Figures 4.5 and 4.6 present the results for all schools in

¹⁶ A measure of dispersion derived from subgroup attainment differences between schools in the 75th and 25th percentiles or upper and lower quartiles, the range of values within which reside the middle 50% of the scores.

Wales, at each level of attainment. They illustrate the maximum percentages attained within schools in each of the four quartiles. Table 4.4 presents the interquartile range for each outcome and both of the Figures and Table 4.4 are based on T₂ data for all schools in Wales using the 2014/15 to 2016/17 combined cohorts. The differences in percentage attainment between the quartiles shows that substantial variation is observed, particularly in the attainment of pupils eligible for FSM. Figure 4.5 appears to suggest a ceiling effect in some subjects at O5+, since in at least a quarter of schools in Wales, 100% of eFSM pupils achieve MDT. In contrast, with smaller proportions of pupils achieving O6+ (compared with O5+), no ceiling effect is observed at these higher levels and the variation between schools is more marked. The results suggest for example that in a quarter of schools, only 5.6% or fewer pupils eligible for FSM achieve MDT O6+ compared with at least 28.6% in the top 25% of schools. Similarly, in a quarter of schools, no pupils eligible for FSM achieve O6+ in LLC, yet at least 26.1% do in the top 25%. When these differences are considered proportionately (i.e., relative to the number of pupils in total attaining each outcome), the variation between schools at O6+ is vast, and with no ceiling effects is considerably greater than the variation between schools at O5+. These results therefore appear to suggest that a) schools vary considerably in the extent to which they secure good outcomes for pupils eligible for FSM and b) that variation is particularly pronounced at O6+.

Table 1.1. School level et sivi and not et sivi papir attainment in 12. Interquartie range							
	eFSM MDT	not-eFSM MDT	eFSM LLC	not-eFSM LLC	eFSM PSD	not-eFSM PSD	
Outcome 5+	-26.0%	-7.8%	-23.8%	-8.9%	-13.3%	-5.9%	
Outcome 6+	-23.0%	-16.7%	-26.1%	-17.4%	-30.8%	-24.4%	

Table 4.4: School level eFSM and not-eFSM pupil attainment in T_2 : Interguartile range



Figure 4.5: Variation between schools in Outcome 5+ attainment based on eligibility for FSM in T_2 (2014/15-2016/17 combined cohorts)

NB: Quartile 1 represents the first (bottom) quartile for each outcome while 4 represents the top. 'eFSM' refers to attainment of pupils eligible for FSM and 'not-eFSM' refers to attainment of those who are not known to be eligible.



Figure 4.6: Variation between schools in Outcome 6+ attainment based on eligibility for FSM in T_2 (2014/15-2016/17 combined cohorts)



Variation in attainment gaps between schools

The research also examines the variation in attainment gaps between schools. Table 4.5 presents the interquartile range for each outcome gap using the T₂ combined cohort while Figure 4.7 illustrates the relative attainment gap quartiles. The results are presented for all schools in Wales and again suggest substantial variation in gaps between schools at O6+. This is perhaps unsurprising given the variation observed in eFSM pupil attainment between schools at this level. The absolute difference between attainment gaps in the upper and lower MDT quartiles at the very least for example is -52 and for LLC is -55. In MDT, this equates to a quarter of schools having a gap of -66.9% or more in favour of not-eFSM learners whilst a quarter have a gap of just -14.9% or less. The differences between upper and lower LLC O6+ gap quartiles presented appear even greater; these results suggest that the attainment gap is -73% or more in a quarter of schools in Wales whilst in another quarter of schools, it is -18% or less. These results therefore suggest that while notable variation in attainment and attainment gaps between schools exists, the variation between schools at higher levels of attainment is particularly large.

Table 4.5: School-level attainment gaps in T_2 : interquartile range							
MDT 05+	LLC5 05+	PSD O5+	MDT 06+	LLC O6+	PSD O6+		
10.8%	11.9%	5.1%	52.0%	55.0%	31.6%		

able 1.5: School lovel attainment gans in T. : Interguartile range



Figure 4.7: Variation between schools in Outcome 5+ and 6+ attainment gaps

Relationship between the variations in attainment and attainment gaps and the percentage of pupils eligible for FSM

Further analyses were undertaken to examine if the proportion of pupils eligible for FSM within the year group contributed to the extent of Outcome 6+ variation between schools. It is possible for example, that the degree of observed variation could be a product of the weighting effect of comparatively smaller numbers of FSM eligible pupils within some schools. These analyses were also necessary to assess whether the percentage of eligible pupils should be a criterion in the selection of schools for case study evaluation. Schools were therefore allocated to one of two groups: those with 16% or more eFSM pupils to represent schools with roughly average to high proportions of eligible pupils and those with less than 16% to represent schools with low proportions. Mean attainment and attainment gaps for each group were compared, together with each group's distribution across the national quartiles for eFSM pupil attainment, not-eFSM pupil attainment and

attainment gaps for each outcome described earlier.¹⁷ Quartile 1 for instance refers to the bottom 25% of schools, whilst quartile 4 relates to the top 25% in terms of their position relative to the position of all other schools in Wales in attainment and gaps for each outcome.

Figure 4.8 demonstrates how the two groups of schools based on the percent of eligible pupils in the year group were distributed in terms of O6+ attainment quartiles in T₂ (quantitative results are found in Appendix K). Greater between-school variation in the attainment of pupils eligible for FSM is observed for the low eFSM school population. This is illustrated through their heavier concentration in the top and bottom attainment quartiles compared with average/high eFSM schools who predominantly occupied the middle attainment quartiles. This adds credibility to the possibility that the weighting of comparatively smaller numbers of eligible pupils within some schools is influencing the observed variation between them. In contrast, a markedly different and clear pattern is observed in the attainment of the larger not-eFSM subgroup in schools with smaller eFSM populations, suggesting that perhaps as expected, these pupils perform better in schools serving more affluent areas than they do in less affluent ones. The presence of a clear pattern for this larger group of learners further reinforces the possibility of a weighting effect on the attainment results of pupils eligible for FSM in low eFSM schools, where the subgroup is proportionately smaller.

Perhaps unsurprisingly, this pattern was similar when looking at the results for attainment gaps (Figure 4.9). When compared on their classification as either low eFSM schools or average-high ones, school distributions across gap quartiles are like those for eFSM attainment. Figure 4.9 shows that schools with lower-than-average proportions of pupils eligible for FSM are more heavily concentrated in the bottom and top gap quartiles, leaving average-higher eFSM schools more heavily concentrated in the middle two (quantitative results are included in Appendix K). Again, this appears to suggest that the between-school

¹⁷ Quartile positions were allocated according to each school's position in relation to the distribution of schools nationally for each attainment outcome and outcome gap which means that different thresholds are used for each outcome.

variation for O6 attainment gaps may well be influenced by the weighting effects of relatively smaller numbers of pupils eligible for FSM within some schools.

Figure 4.8: Distribution of schools across eFSM and not-eFSM Outcome 6+ attainment quartiles according to the percentage of eFSM pupils in the year group in T_2





eFSM LLC O6+ attainment quartiles














Figure 4.9: Distribution of schools across Outcome 6+ attainment gap quartiles according to the percent of eFSM pupils in the year group in T_2



PSD O6+ attainment gap quartiles



These findings are supported by a comparison of mean attainment and attainment gaps, and their standard deviations (SD) for schools when classified as either low or average/high eFSM (Table 4.6). The results suggest that greater variation exists in both the attainment of pupils eligible for FSM and attainment gaps among schools with smaller proportions of pupils eligible for FSM, demonstrated by the higher standard deviations for this group of schools. Furthermore, as the standard deviations of the attainment of pupils eligible for FSM within schools with smaller proportions of these pupils are notably higher than those for not-eFSM attainment within the same sample of schools, it is more likely that the weighting effects of comparatively smaller numbers of pupils eligible for FSM are influencing the results. These findings therefore suggest that at least at O6, indicators of a school's record of attainment for pupils eligible for FSM and associated attainment gaps may be less prone to the impact of an

individual child's attainment (or that of a very small group of children) in schools with an average or higher proportion of pupils eligible for FSM. This has inevitable implications for the selection of case studies.

	Schools with pupils eligit	16% or more ble for FSM	Schools with less than 16% of pupils eligible for FSM		
Attainment	Mean	SD	Mean	SD	
eFSM Pupil MDT6	18.4	14.3	22.7	24.5	
not-eFSM Pupil MDT6	35.2	14	43.2	12.8	
eFSM Pupil LLC6	18.2	14.5	19.3	22.1	
not-eFSM LLC6	35	14	42.5	13.1	
eFSM Pupil PSD6	35.7	20.9	45.2	30.9	
not-eFSM PSD6	55.2	19.3	68.8	16.4	
Attainment Gap	Mean	SD	Mean	SD	
MDT6	-37.3	32.2	-45.1	44.9	
LLC6	-37.1	32.6	-51.5	42.7	
PSD6	-25.2	24.9	-30.3	35.6	

Table 4.6: Mean and standard deviations in attainment and attainment gaps of schools according to percentage of pupils eligible for FSM in the year group

Based on combined T₂ cohorts

Comparison of progress towards closing gaps between schools

The school-level analyses so far considered T_2 data to provide a more recent snapshot of differences in attainment and attainment gaps between schools. However, it is important to look at the extent to which progress towards narrowing gaps varies between schools as well. For this purpose, T_1 and T_2 school-level attainment gaps were examined to see whether the pattern of progress towards closing gaps depicted at the national level had been universally shared by schools across Wales. Relative change was calculated by subtracting the T_1 relative outcome differentials in each school from the T_2 differentials; the result simply reflects the amount and direction of change.

Figure 4.10 presents the frequency distribution for school-level relative change in attainment gaps for MDT O5+ and MDT O6+ as an example. In this figure, zero represents no change between the two time periods, cases to the right of zero indicate the gap has widened and cases to the left indicate the gap has narrowed (histograms for LLC and PSD indicate similar patterns and are provided in Appendix L). The data suggest considerable variation exists

between schools in their progress towards closing gaps. Perhaps unsurprisingly, greater variation is observed at higher levels: reflected by the larger spread of the distribution and higher standard deviations. This is also the case for the other subjects (Appendix L). The results suggest that while many schools experienced little change in their attainment gaps, in some schools, gaps changed substantially in both positive and negative directions and again, particularly at O6+. At Outcome 5+, the results suggest that most schools (53%-56%) narrowed gaps to some degree over the study period, whilst in the remainder of schools, there was either no impact or they had widened. But the picture was less positive at O6+, with fewer than half of schools (47%-48%) demonstrating that gaps in either MDT or LLC had narrowed. Instead, in most schools, gaps appeared to have remained the same or widened.

While the histograms in Figure 4.10 provide useful illustrations of the considerable variation between schools, it is important to consider variation in progression towards closing gaps in relation to the size of attainment gaps to begin with and exclude schools where the weighting of numbers of pupils eligible for FSM might be an issue. Additional observations are therefore offered using T₁ and T₂ quartile data. To minimise the potential weighting effects of smaller cohorts of pupils eligible for FSM described earlier, only schools with 16% or more pupils eligible for FSM are included. Although slightly different gap thresholds are used in T₁ and T₂ (as quartiles for each period were generated separately and will depend on the corresponding data), each quartile represents roughly 25% of schools in Wales, so movement between the top and bottom quartiles is likely to represent significant relative change.



Figure 4.10: Change in school level MDT O5+ and O6+ attainment gaps between T_1 and T_2

Figure 4.11: Change in attainment gap quartiles between T_1 and T_2 for schools with 16% or above eFSM pupils in the year group¹⁸



1= Worst quartile, biggest gaps in favour of not-eFSM pupils, 4= Top quartile, smallest gaps in favour of not-eFSM pupils.

Figure 4.11 demonstrates patterns of migration between different attainment gap quartiles. Each colour on the left represents the four different quartiles and indicates which quartile schools belonged to in T_1 . The bands represent the pathway or movement of schools within each quartile at T_1 (on the left) to their position at T_2 (on the right). The thickness of the band represents the number of schools within each movement stream and so at a very basic level, the figure illustrates the degree of movement and variation between schools in progress towards narrowing gaps over time. It is based on MDT attainment gaps although patterns for

¹⁸ Low-eFSM schools have been excluded from the alluvial charts presented in this figure.

other subjects are similar and can be found in Appendix M. Tables 4.7 and 4.8 display the quantitative results for all core outcomes, illustrating T_1 gap quartile positions in relation to T_2 positions numerically. Table 4.7 illustrates the results for Outcome 5+ and Table 4.8 for Outcome 6+.

T ₁ Ga	р	T ₂ MDT O5+ Gap Quartile				T ₂ LLC O5+ Gap Quartile				T ₂ PSD O5+ Gap Quartile			
Quartile		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Q1	Ν	43	38	29	21	37	31	33	24	42	44	26	28
	Row %	33%	29%	22%	16%	30%	25%	26%	19%	30%	31%	19%	20%
Q2	Ν	40	71	49	22	43	61	53	18	59	85	20	35
	Row %	22%	39%	27%	12%	25%	35%	30%	10%	30%	43%	10%	18%
Q3	Ν	33	58	69	22	34	77	53	22	36	47	22	26
	Row %	18%	32%	38%	12%	18%	41%	29%	12%	28%	36%	17%	20%
Q4	N	23	16	25	23	19	20	35	22	26	28	26	31
	Row %	26%	18%	29%	26%	20%	21%	37%	23%	23%	25%	23%	28%

Table 4.7: Movement between attainment gap quartiles for expected levels (Outcome 5+)

Q1=biggest gaps in favour of not-eFSM pupils Q4= smallest gaps in favour of not-eFSM pupils.

T_1 Gap		T ₂ M	DT 06+	Gap Qu	artile	T ₂ LLC O6+ Gap Quartile				T ₂ PSD O6+ Gap Quartile			
Quartile		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Q1	Ν	23	11	20	21	28	16	17	17	25	30	19	22
	Row %	31%	15%	27%	28%	36%	21%	22%	22%	26%	31%	20%	23%
Q2	Ν	21	53	66	28	14	60	64	33	39	53	49	26
	Row %	13%	32%	39%	17%	8%	35%	37%	19%	23%	32%	29%	16%
Q3	Ν	18	61	57	43	11	51	60	48	32	54	53	37
	Row %	10%	34%	32%	24%	7%	30%	35%	28%	18%	31%	30%	21%
Q4	Ν	25	51	31	43	24	45	31	56	26	35	39	41
	Row %	17%	34%	21%	29%	15%	29%	20%	36%	18%	25%	28%	29%

Table 4.8: Movement between attainment gap quartiles for higher levels (Outcome 6+)

Q4= smallest gaps in favour of not-eFSM pupils, Q1=biggest gaps in favour of not-eFSM pupils.

Using the MDT Outcome 5+ data as an example, Table 4.7 shows that of the schools in the first quartile where attainment gaps were largest at T_1 (i.e., in favour of pupils not eligible for FSM), 33% remained there in the second period (T_2), 29% had moved to the second quartile (lower middle), 22% to the third (upper middle) and 16% had moved into the top quartile. Similarly, of those in the top quartile (Q4) at T_1 , 26% remained there, 29% had moved into to the third, 18% to the second and 26% had fallen to the bottom gap quartile at T_2 . These patterns of fluctuation were not markedly different for LLC or PSD. They illustrate that even

though many schools held onto their quartile positions from T_1 (represented by data in bold), there was still a significant degree of movement between quartiles. This also seemed to be the case for attainment gaps at higher levels illustrated in Table 4.8.

However, there are some noteworthy differences between the patterns of progress towards narrowing gaps at Outcome 5+ and Outcome 6+. For example, the data in the outlined cells of the first row of the tables suggest that while at Outcome 5+ a similar proportion of schools remained in the bottom quartile with the biggest gaps for all subjects (between 30-33%), a greater number of schools remained in this quartile for LLC at Outcome 6+ (36% at O6+ compared with 30% at O5+). Compared to LLC at O6+, the proportion remaining in the worst quartile was slightly less in the other subjects at this level. These findings suggest that attainment gaps in literacy are more stubborn at higher levels of attainment. Indeed, this finding is upheld by the greater number of schools retaining their advantage in terms of smaller gaps between learners in literacy at higher levels than those at lower ones: 36% compared with 23% shaded grey. In fact, a greater number retain this advantage in literacy at higher levels, than in any other subject, at either Outcome 5+ or 6+ (shaded in grey in both tables). Furthermore, the encircled data in the tables indicates that at higher levels, fewer schools appeared to slip from the top quartile to the bottom quartile (i.e., from Q4 to Q1) than they did at expected levels of attainment in any subject. Taken together then, four observations can be made in relation to the impact of the FP on narrowing gaps at an individual school level. These are that a) most schools moved quartile positions in all subjects and levels of attainment between the two time periods; b) the magnitude of movement was significant in some; c) attainment gaps both increased and decreased and d) that they remain stubborn in some schools, especially for literacy at higher levels.

4.4 Relationship between attainment and pedagogy

Clearly, the analyses presented so far do not account for any variations in the way the FP is enacted between schools. This final section of the analysis therefore focuses on FP pedagogy and its relationship to attainment, particularly of pupils from disadvantaged backgrounds. As explained earlier, one of the benefits of this research is the ability to draw on the data collected by Taylor et al. (2015). This section does that by using the FP implementation score (FPS) derived from Taylor et al.'s case study classroom observations (see Taylor et al., 2015). The score for each school is used as a proxy for the degree to which FP pedagogies were embraced in the classroom (see Chapter Three) and this section of the analysis aims to establish whether this is related to outcomes. Power et al. (2019) found that the likelihood of a child achieving the FPI (the measure that indicates whether a pupil achieves Outcome 5 or higher in MDT, LLC, and PSD), increased with greater use of FP pedagogies in the classroom indicated by the FP score. In contrast, this research examines whether the greater use of FP pedagogies at the time of Taylor et al.'s evaluation, was related to an increased likelihood of achieving either MDT, LLC or PSD at O5+ or O6+, and whether any initial observed influence has continued over the study period.

Table 4.9 presents the results of a series of binary logistic regression models that control for the following pupil characteristics: gender; eligibility for free school meals; assigned as having special educational needs; and ethnicity. The year the outcomes were obtained is also included in the models as they are based on the combined T₁ cohorts in each school (i.e., all the classroom observations that were made during the earlier period). At the school level, the model considers the FP score and the percentage of pupils who are: male; eligible for FSM; assigned as having SEN; and White British, in addition to the size of the school year group¹⁹. The FP score was standardized prior to inclusion and the odds ratios highlighted in bold reflect the likelihood of a pupil achieving each outcome, given an increase in one standard deviation of the score.²⁰ The models are based on the analysis of 2,914 pupils drawn from 36 schools over the three-year period.

The resulting odds ratios for the FP Score shaded blue in Table 4.9 suggest that an increase in the degree to which FP pedagogies are enacted is significantly associated with an increased probability that pupils achieve each outcome. For example, at O5+ the models estimate that pupils are 21% more likely to achieve MDT (OR = 1.21 p < 0.5), 24% more likely to achieve LLC (OR = 1.24 p < 0.05) and 47% more likely to achieve PSD (OR = 1.47 p < 0.01) when FP

¹⁹ The regression models were also generated with the additional variable 'school ID' (an arbitrary and unique identifier allocated to each school) as a fixed effect in the models. However, as this did not change the strength (r^2) of the models, the results are not presented.

²⁰ An increase of one standard deviation in the score is approximately equivalent to moving from an 'average' school to being in a school in the top fifth of schools implementing the FP (Taylor et al, 2015).

pedagogies were embraced more fully. Although less influential at O6+, an increase in the FP Score remained significantly associated with increased odds of achieving outcomes suggesting there is something in the way that the FP is enacted that may improve pupil outcomes. However, the low odds ratios for pupils eligible for FSM (emphasized in bold) suggest that the degree to which FP pedagogies are embraced does not mitigate for the effect of being FSM eligible on any attainment outcome.

		MDT 5+	MDT 6+	LLCEW 5+	LLCEW 6+	PSD 5+	PSD 6+			
Valid cases		2914	2914	2914	2914	2914	2914			
Missing cases		96	96	96	96	96	96			
Cox & Snell R So	quare	0.177	0.167	0.219	0.185	0.145	0.223			
Nagelkerke R So	quare	0.357	0.237	0.413	0.259	0.365	0.298			
Variable		Exp (B) (Odds Ratios)								
Constant		0*	0***	0***	0***	0***	0***			
Canadan (Mada)	Female									
Gender (Male)	Male	1.05	1.419***	0.669**	0.616***	0.538***	0.506***			
Free school	Not eligible									
meals	Eligible	0.587***	0.616**	0.540***	0.554***	0.640*	0.537*			
Special	No SEN									
educational needs	SEN	0.050***	0.109***	0.045***	0.058***	0.49***	0.136***			
EL : 1	White British									
Ethnicity	Not White British	0.778	1.397	1.124	1.168	0.724	1.158			
Year		1.210*	1.268***	1.388***	1.250***	1.616***	1.387***			
Foundation Phase Score (standardised)		1.212*	1.198***	1.241*	1.042*	1.473***	1.155**			
% of school cohort who are male		0.987	0.986**	0.985*	0.996	0.979*	1.003			
% of school coho	% of school cohort who are FSM eligible		0.981***	0.979***	0.983***	0.972***	0.969***			
% of school cohort with SEN provision		1.016***	1.013***	1.015***	1.016***	1.020***	1.022***			
% of school not White British		0.996	0.998	1.007	0.996	0.994	0.987**			
School year size		1.011*	1.010***	1.004	1.003	1.007	1.001			

Table 4.9: Estimating the likelihood of achieving each outcome in T_1

*** p<.001 ** p<.01, *p<.05. Based on combined cohorts: 2011/12 to 2013/14.

The same regression models were generated for T₂, the later combined three-year period (2014/15 to 2016/17), to determine whether the influence of the child-centered pedagogies observed in T₁ persisted years later (Table 4.10). Interestingly, the degree to which pedagogies were embraced in T₁ was still associated with an improved probability of achieving higher levels of MDT (OR = 1.107 p < 0.05) and PSD (OR = 1.21 p < 0.001) in T₂ but not with any outcome at expected levels or LLC at O6+. This means that the association between the original FP score and attainment had weakened over time. While the attainment results are derived from completely different cohorts of pupils, classroom practice in these schools may have changed due to differences in staffing, priorities, or

internal and external pressures during the study period. The reduction in the score's influence could therefore mean that it is no longer a reliable measure of what was happening in the classroom at Time 2, and simply reflects the difficulty of predicting pedagogical practice within a classroom from observations made some years earlier. This is an issue that will be returned to in the following empirical chapters.

		MDT O5+	MDT O6+	LLC 05+	LLC O6+	PSD O5+	PSD O6+		
Valid cases		3143	3143	3143	3143	3143	3143		
Missing cases		83	83	83	83	83	83		
Cox & Snell R Square		0.176	0.148	0.177	0.183	0.11	0.304		
Nagelkerke R Square		0.418	0.2	0.4	0.247	0.369	0.418		
Variable		Exp (B) (Odds Ratios)							
Constant		0	0	0	0	2.05E+116	0		
Conder (Male)	Female								
Gender (Male)	Male	0.684*	1.164	0.646**	0.600***	0.331***	0.434***		
Funda and and an and a	Not eligible								
Free school meals	Eligible	0.610**	0.598***	0.731	0.612***	0.597*	0.611***		
Special educational	No SEN								
needs	SEN	.018***	0.124***	0.025***	0.092***	0.022***	0.089***		
	White British								
Ethnicity	Not White British	0.69	1.065	1.042	1.277	1.553	1.077		
Year		1.069	1.098	1.036	1.076	0.879	1.124*		
Foundation Phase Score (standardised)		1.066	1.107*	1.009	1.072	1.169	1.210***		
% of school cohort who are male		0.993	1.006	1.009	1.004	0.996	0.994		
% of school cohort who	0.997***	0.988**	0.980**	0.987**	0.982*	0.962***			
% of school cohort with	1.025***	1.004	1.018**	1.008*	1.004	1.013**			
% of school not White B	0.996	1.002	0.994	1.004	0.984	0.992			
School year size		1.009*	1	1.007	1	1.003	1.008**		

Table 4.10: Estimating the likelihood of achieving each outcome in T_2

*** p<.001 ** p<.01, *p<.05. Based on combined 2011/12 to 2013/14 cohorts.

4.5 Chapter Summary

This chapter has examined the extent to which the FP has impacted attainment in the earlyyears and mitigated the impact of poverty on pupil outcomes. This was explored using teacher-assessed attainment outcomes measured between 2012 and 2017. The findings suggest a significant rise in national pupil attainment including the attainment of pupils eligible for FSM, although this has slowed more recently. Despite this, significant povertybased disparities were found, and these were particularly marked at higher levels of achievement. While the relative attainment gap appeared to have narrowed at both expected and higher levels of attainment, this was not enough to sufficiently narrow the absolute gap at higher levels, which increased during the study period. When regression models were used to control for other pupil characteristics and school level variables, the influence of poverty appeared to have lessened for some outcomes at expected levels but remained largely unchanged at higher ones. It is possible that the Pupil Deprivation Grant that specifically targets pupils eligible for FSM introduced during the study period has contributed to some of the success seen at expected levels for these learners (e.g., see Pye et al., 2017). However, the analyses are unable to account for this. Therefore, the findings presented in this chapter suggest the impact of the FP on measured attainment outcomes has been mixed.

How this evidence should be used depends on the policy's objectives (an issue highlighted by Gorard, 2018). If raising average attainment is paramount, then the FP could be deemed a success. If raising the attainment of pupils from disadvantaged backgrounds is paramount, then it could equally be considered so. However, if mitigating the impact of poverty by improving the outcomes of pupils eligible for FSM relative to their peers is paramount, i.e., closing the gap, then the programme's success has perhaps been more limited. The difficulty lies in the lack of clarity over the relative importance of these objectives in the policy documentation.

The chapter has also suggested that the patterns in attainment and attainment gaps depicted at the national pupil level are not shared by all schools in Wales. Evidence was found of substantial variations between schools in terms of overall attainment, the attainment of pupils eligible for FSM, and poverty-based attainment gaps. Furthermore, while significant progress towards narrowing gaps in attainment was apparent in some schools, many had made little impact, and some experienced a notable widening during the study period. That said, a substantial amount of fluctuation at the school level between time periods was detected which could both indicate changing practices within schools or more simply, the natural and random variation between individual cohorts and the difficulty of comparing attainment gaps over time on a school level when based on such small numbers. While efforts were made to reduce this (by combining years and removing low eFSM schools), such fluctuation is aligned with recent research by the Social Mobility Commission on the impact of the Pupil Premium in England (Riordan et al., 2021) which found huge fluctuations in

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progress gaps between school cohorts over time, with very few maintaining a 0-progress gap between learners. Wider economic changes and new laws such as Universal Credit can also have a significant impact on numbers of FSM eligible pupils and related attainment gaps within schools (DfE, 2018; Gorard, 2022). Attributing change in attainment gaps at a school level solely to the success of the FP is therefore dubious in the absence of more detailed information.

The nature and degree of fluctuation renders it difficult to draw solid conclusions about progress towards narrowing gaps on a school level. It is possible that some variation between schools and cohorts signifies differences in how the curriculum has been enacted by different practitioners, especially given the evidence of the link between FP pedagogy - represented by the FP Score - and attainment reported by Taylor et al (2015). However, this cannot be concluded from the data presented here alone. Instead, the results must be considered alongside a reflection of how teacher interpretations of the FP relate to attainment, other educational outcomes, and perceptions of equity, and how these have changed during the study period. Indeed, this is especially important given the programme's broader aims and objectives and the wider range of outcomes that it expected to deliver. This, therefore, is the focus of the following two empirical chapters.

Chapter Five: A quantitative exploration of teacher perspectives of the Foundation Phase and its enactment: a comparison over time

5.1 Introduction

In contrast to Chapter Four's narrow focus on measured attainment outcomes, this second empirical chapter investigates the impact of the Foundation Phase (FP) from the angle of teacher views and enactment of the FP. This approach speaks to the second research objective, to examine how the FP is enacted and perceived by practitioners, particularly in relation to children from disadvantaged backgrounds. In doing so, it addresses the following central research questions:

- How do teacher interpretations of the FP relate to attainment, other educational outcomes, and perceptions of equity?
- How have perspectives changed during the study period?

Chapter Four made some interesting observations that can be partly followed up in this chapter. It demonstrated that while the attainment of all learners including those from disadvantaged backgrounds had improved, the FP's impact on attainment gaps had been limited. Indeed, the influence of poverty remained strong, especially at higher levels of progress. The chapter also identified significant differences between schools in terms of pupil attainment and progress towards narrowing attainment gaps, demonstrating that overall patterns depicted at the national level were not universally shared. The chapter proposed this could signal potential differences in the way the FP was enacted which seemed entirely possible given that early research found significant differences between practitioners' pedagogical engagement with the FP and an association with pupil attainment (see Taylor et al., 2015). If teachers were still enacting the programme very differently (i.e., not all engaging equally with the underpinning pedagogical approach), it would make it difficult to appraise the efficacy of this curriculum and attribute changes to or variations in outcomes to its pedagogical design. This therefore warranted further investigation.

There were three central reasons for exploring teachers' perceptions and enactment of the FP and considering how these had changed over time. Firstly, early research undertaken in 2012 and before had identified widespread disparities in the way the FP was enacted (e.g., Siraj & Kingston, 2014; Taylor et al., 2015) and it was important to see if this was still the case, and if so, what this might be driven by. While Welsh Government and Estyn responded to the early evaluations by producing a range of guidance and support materials, there is little published research to evidence how this impacted teacher knowledge or practice in the FP. The materials included the publication of the FP Action Plan designed 'to continuously improve the way in which the FP is implemented and delivered' (Welsh Government, 2016a, p.2) and the development of an online resource with similar aims featuring useful links and best practice case study videos about pedagogy (FPEN Zone). They also included further exemplification of the pedagogical features of the policy, new priorities for practice, and the publication of eleven explicit 'pedagogical principles' to guide practitioners (Welsh Government, 2016a, see Appendix E). One might expect these materials to have improved understanding among the workforce and therefore, practice, in terms of being more consistent and aligned with the intended curriculum. However, this is not known to have been investigated yet.

Secondly, as highlighted in the introductory chapters, Welsh Government introduced a raft of other educational policy initiatives and objectives following the roll-out of the FP which were designed to impact pupil outcomes including those of disadvantaged learners. These initiatives are interwoven with the FP and may influence practice and therefore, outcomes, but this cannot be assessed through the attainment data presented so far. While it is difficult to disentangle the effects of one initiative from another, it is possible to explore their influence on enactment and outcomes according to teachers through investigating their perspectives, again justifying the focus of this and the following chapter. Thirdly, as explained in the introductory chapters, improved attainment was only one goal of the FP and early research suggested that practitioners believed it especially benefited learners from disadvantaged backgrounds (Taylor et al., 2015). Investigating whether this has changed is therefore important, especially given the findings of the previous chapter.

This empirical chapter therefore focuses on practitioner attitudes and experiences using the results of a national survey of FP Lead Practitioners (Appendix D), conducted in the second phase of the research in 2019. A particular strength of the research lies in its ability to compare changes in attitudes using data from two time periods by drawing on the national survey of headteachers and Lead Practitioners undertaken by Taylor et al. in 2012, and its results (see Taylor et al., 2015). The 2019 survey aimed to compare perceptions of the FP, obstacles to its enactment, and its impact on areas of schooling and different groups of learners with the findings from 2012 to provide a quantitative snapshot of opinion and how it had changed over time. The survey also investigated how the FP was enacted across schools in Wales and how easy practitioners found engaging with the different pedagogical elements of the curriculum described in the Action Plan (see Welsh Government, 2016a). It explored the perceived impact of the more recent policy measures on the FP, including the Literacy and Numeracy Framework (LNF), the Digital Competency Framework (DCF), Year 2 national tests in reading and numeracy, and the ESTYN inspection and Regional Consortia accountability frameworks.

The results are based on 289 responses to an anonymous online survey conducted in 2019 (Appendix D), representing almost a quarter of all schools in Wales with responsibility for the FP. It also draws on 361 responses of headteachers/Lead practitioners from Taylor et al.'s survey undertaken in 2012 to indicate how the general opinion of those leading the FP has changed over time (see Taylor et al., 2016a). Both sets of results are drawn from practitioners with the same role, that is, lead responsibility for the FP. No classroom assistants were included. Where questions were only asked of headteachers in the 2012 survey, this is clearly stated when comparisons are made. Where associations between survey responses are examined (such as how easy practitioners felt it was to engage with the pedagogies and the extent to which they were embedded for example), the chapter reports the correlation coefficients using Spearman's Rho. Where the terms 'practitioner(s)' or LP are used, this refers to 'Lead Practitioner(s)' to whom the survey was addressed. Key Stage 2 (KS2) refers to the upper primary years three to six (ages seven to eleven), that immediately follow the FP.

The chapter begins with a focus on how practitioner views have changed, looking at general perceptions of the FP (also referred to as the 'programme' or 'curriculum'), and its impact on

a range of outcomes and groups of learners. Next, engagement with the FP pedagogical principles is explored, including how easy practitioners felt it was to enact the pedagogical approach in their schools. The focus then switches to exploring potential obstacles to practice and changes in perceptions over time. This includes a consideration of staff-to-pupil ratios, awareness of the pedagogical principles and more recent resources, in addition to the impact of newer national policies and frameworks on practice. The chapter concludes with a summary of the findings.

5.2 Practitioner views of the Foundation Phase and changes in perceptions over time

Satisfaction with the curriculum policy

While attitudes towards curriculum reform including the extent to which practitioners welcome the principles and philosophy behind it are important, research suggests positive attitudes at this level do not guarantee a curriculum will be enacted as designed (e.g., Priestley & Minty, 2013). That said, analysing trends in satisfaction over time can help indicate potential problems that have arisen since a curriculum's introduction, or the effectiveness of measures introduced to address problems with a curriculum identified by early research. The survey therefore compared data on levels of reported satisfaction with the FP as a policy (Figure 5.1) and views on how important teachers felt this curriculum was to Welsh Government (Figure 5.2). The findings suggest a clear majority were satisfied with the programme in 2019 and this was remarkably consistent with satisfaction in 2012. However, what is interesting is that while the majority still felt that it was important to the Welsh Government, there appeared to be slightly less confidence this was the case in 2019. This might indicate perceived conflicts with more recent educational priorities and initiatives or reduced levels of support. Reduced support in terms of resources for instance might signify to practitioners that Welsh Government had other priorities.

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Figure 5.1: Satisfaction with the policy for the Foundation Phase in 2012 and 2019

Figure 5.2: How important practitioners believed the policy was to Welsh Government in 2012 and 2019



Perceived impact on outcomes and areas of schooling

The introductory chapters highlighted that the FP was ambitious, and the comprehensive review of the policy documentation identified a wide number of curriculum objectives relating to a broad range of outcomes (Maynard et al., 2012). So far, the thesis has only considered attainment in the three 'core' subjects measured at the end of Year 2, but given the policy's ambition, it is important to consider practitioner opinion of its impact on a broader array of education domains. The 2012 and 2019 surveys therefore attempted to

n=336 in 2012; n=279 in 2019. 2012 responses are of headteachers, some of whom were FP Leads.

capture a range of areas related to some of the key objectives of the policy identified by Maynard et al., (2012). These include views of the programme's impact on areas like attendance, behaviour, literacy, numeracy, well-being, attainment gaps and attitudes to learning. The data for 2012 and 2019 are illustrated in Figure 5.3.

In 2019, most practitioners felt the FP had a positive impact on all of the schooling domains listed in the survey, with the exception of attainment gaps. Pupil well-being and attitudes to learning were especially seen to benefit from this curriculum. Furthermore, these positive perceptions appeared to have become more widespread over time, since a notably higher proportion of respondents reported positive impacts in 2019 than in 2012. Although again, this was not the case for attainment gaps. Significant increases were seen in the percentage of positive responses for attendance which had more than doubled, and behaviour which was almost 20% higher. Although school attendance data was not collected as part of this research, the suggestion that the FP as a curriculum had positively benefited pupil attendance might reflect a belief that the programme leads to greater learner enjoyment and engagement in schooling, which was also implied by the very high number of respondents recording positive benefits for pupil well-being and attitudes to learning in the survey (89% and 83% respectively). These results seem important and may indicate that increased understanding and embedding of the FP's pedagogical principles have advantaged learners in several ways and helped sustain the levels of teacher satisfaction with the policy highlighted earlier. Furthermore, the perceived positive benefits appear to relate to the different, broader policy goals and outcomes described in the introductory chapters, that would not be associated with a more traditional curriculum.

Figure 5.3: Perceptions of different areas of schooling positively impacted by the Foundation Phase in 2019 and 2012



However, the worrying and notable exception to this trend relates to perceptions of the programme's impact on attainment gaps. Figure 5.3 demonstrates a drop in the proportion of positive responses from practitioners, from 54% in 2012 to 44% in 2019. Furthermore, this is the only outcome in the 2019 survey for which the majority of respondents felt it had either made no difference to (47%) or had had a negative impact on (10%). This is interesting, since it potentially reflects the quantitative findings of the last chapter which suggested a somewhat limited impact on gaps in attainment, a more recent slowing of progress, poverty's strong influence at higher levels of attainment and significant variation between schools in terms of attainment gaps and progress towards narrowing them. This finding is concerning given Welsh Government's ambition and increased policy focus on narrowing attainment gaps since the FP was rolled out. While it must be acknowledged that responses to the 'attainment gap' question in the survey may have related to gaps other than those associated with poverty, the point remains that many did not perceive the policy as having a positive impact on differential attainment based on shared characteristics, such as socio-economic background, ethnicity or gender.

n= 214 to 269 in 2012; n=280 to 288 in 2019

An additional aim of the FP was to raise attainment and reduce differentials at Key Stage 2 (KS2) (Maynard et al., 2012), but the early Taylor et al., (2015) evaluation found that its introduction was not associated with significant improvements in measured attainment outcomes in KS2 or in attainment gaps based on eligibility for free school meals (FSM). That said, the analysis was based on data from a small sample of 'pilot' schools who were early enactors of the FP, prior to curriculum roll-out (see Taylor et al., 2015). It is therefore worth reflecting on teacher perceptions from the larger national survey samples here. In 2012, the survey of headteachers and LPs revealed a relatively even split in opinion in terms of those who believed that pupils would be better prepared for KS2 and those that did not (n=331). 87% thought that the FP would have an impact on KS2 (n=334) and 85% felt that teaching at KS2 would have to change (n=333). These early findings seemed to point quite powerfully to anticipated conflicts between the two phases of education, at least in terms of their pedagogical design.

Such tensions appear to be borne out by the 2019 survey findings, where as many as 61% of practitioners indicated that the FP had had a negative impact on transitions to this later phase of learning (n=285). This is noteworthy, since the FP had been in place for a long time by then and participants were likely to have been responding from a position of experience. In 2012, survey responses were more likely to be based on anticipated impact, at least in terms of KS2. The 2019 survey found that only 32% of LPs felt the FP positively impacted 'achievements at KS2', while 51% felt it had no impact and a further 17% indicated that the impact had instead, been negative (n=280). These results may be surprising for those who expected the FP to equip learners with the skills and dispositions that would benefit later learning. However, while attainment data for KS2 was not collected in the current study, the important point to note is the strong suggestion of perceived tensions between the different approaches of each phase of learning and their curriculums.

Perceived beneficiaries of the Foundation Phase

Given the perceived impact on attainment gaps and the findings of Chapter Four, it is important to consider changes in perceptions of the FP in terms of its benefit for different groups of learners. One might have expected that the suggested decrease in perceived impact on attainment gaps would be reflected in a similar decrease in the proportion of respondents perceiving advantages for certain groups of learners. However, Figure 5.3 illustrates that for most groups, there is little change in the percentage of positive responses between 2012 and 2019 and that most practitioners still believed the FP positively favoured many groups of learners, especially boys and pupils with Special Educational Needs (SEN). However, what is particularly interesting in terms of the focus of this research, is that the proportion who felt the FP especially advantaged pupils affected by poverty had increased, from 54% in 2012 to 67% in 2019. Furthermore, this was the biggest difference in responses between the two time points out of a list of eight different groups of learners. Only one other group (pupils not educated in their first language) had witnessed an increase in positive responses, but this was by a smaller degree (7%). The proportion of respondents indicating positive benefits for the other groups of learners had either stayed the same or was smaller, but these changes were mainly marginal, aside from girls which had reduced by 9%.

These results are especially noteworthy, since they appear to be in complete tension with the decline in the percentage of respondents who felt that the policy was benefiting attainment gaps. Put simply, fewer practitioners felt the policy helped narrow attainment gaps, yet more felt it particularly advantaged pupils affected by poverty. With almost 70% of practitioners indicating particular advantages for these pupils, but little reflection of this in Chapter Four's attainment data, it may be that the benefits perceived by practitioners are broader than traditional achievement.



Figure 5.4: Perceptions of groups of learners advantaged by the Foundation Phase in 2012 and 2019

Percentage of respondents perceiving particular advantages for these groups

35%

39%

39%

58%

54%

65%

67%

n= 2012 ranged from 174 to 274 and in 2019: 258 to 288

Pupils from advantaged backgrounds 2012

Pupils from advantaged backgrounds 2019

Not educated in 1st language 2012

Not educated in 1st language 2019

Pupils living in poverty 2012

Pupils living in poverty 2019

5.3 Engagement with the intended pedagogy of the Foundation Phase

Expressed levels of pedagogical engagement

BME pupils 2019

Chapter Two highlighted that early research on the FP revealed weaknesses in pedagogical understanding among the workforce, related disparities in practice, and recommended additional training and guidance to address them (Siraj & Kingston, 2014; Taylor et al., 2015). As described earlier, Welsh Government's response included new guidance materials, specific resources on pedagogy and the FP Action Plan which clarified the main elements of the pedagogical approach through the publication of eleven pedagogical principles (2016a). The pedagogical principles fall under three central areas: the child (and how they learn and should be supported); the learning environment (what it should provide and enable); and the practitioner (how they should plan and observe learning, engage with children and their parents/carers, and continue their professional development). Taylor et al., (2015) maintained that practice can be defined by the presence of these pedagogical elements and that the success or impact of the programme is heavily dependent on whether the FP (using

these pedagogical elements) is being 'fully' implemented across schools and classrooms in Wales.

The 2019 survey attempted to obtain an idea of the extent to which these principles were embedded in practice, as a rough gauge of the extent to which the intended pedagogical approach was being universally embraced. This was important for understanding whether the attainment patterns observed in Chapter Four and any other outcomes identified during the research could be attributed to the intended pedagogical approach. While it is difficult to determine enactment from a survey, and particularly pedagogical practice, it is possible to gauge the extent to which respondents felt the FP provision within their school delivered the environment-related pedagogical elements of the programme. Practitioners were therefore asked about the extent to which the learning environments within their schools provided for the range of environment related principles in the Action Plan. These are listed in Figure 5.5, which summarises practitioner responses. The response categories 'all' and 'most,' and 'some' and 'very few' are collapsed in the figure to simplify the presentation and interpretation of the data (see Appendix M for non-collapsed data).

The data suggest that while some disparities may exist, most schools in Wales are still some way off ensuring that all their FP learning environments conform to the environment-related principles, since less than a third of respondents felt any one of the principles were provided for in 'all' of their provision (Appendix M). Figure 5.5 illustrates that in a significant number of schools (between 20% to 30%), practitioners felt that only 'some' or 'very few' of their learning environments provided for them, although the majority of respondents indicated that 'most' of their learning environments did. The biggest area of weakness appeared to be the provision of environments that afford opportunities for children to be physically and cognitively active, despite the centrality of this element in the curriculum. Only 19% of practitioners reported that 'all' of their learning environments provided this and 30% felt that only 'some' or 'very few' did. The main finding from this data then, is that at least in terms of learning environments, the enactment of the pedagogical approach may still vary.

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Figure 5.5: Perceptions of the extent to which the principles related to the environment are embedded

Opportunities for children to be physically and cognitively active and have quiet time for contemplation and thought

Space that enable children to apply, use, consolidate and extend their skills across areas of learning

Access to resources that enable choice and develop independence in learning

Flow between continuous, enhanced and focused activities



Percentage of respoondents

■ All or most learning environments ■ Some or very few learning environments

n= 249 to 251 to the question: 'Thinking about all the learning environments that make up the Foundation Phase in this school, how many provide:'

The survey also asked Lead Practitioners how many of their FP staff embraced the principles related to practitioners such as actively engaging parents/carers and sharing and learning from best practice. These were again taken from the Action Plan and are listed in Figure 5.6 which summarises the responses using the same collapsed answer categories as the previous figure. While many respondents felt that most FP staff in their schools engage with these principles, there was greater variation in the responses for this set of principles. This suggests greater disparities in practice. According to those surveyed, a significant number of FP staff may not be engaging with these principles, with 30-40% indicating that only 'some' or 'very few' practitioners engage in 'Sustained Shared Thinking' with each child, continuously develop themselves professionally or actively engage parents/carers as partners in learning. This suggests that these may be underdeveloped areas of professional practice, despite their position in the Action Plan and the value that research has placed on them in supporting the successful implementation of the FP (e.g., see Kingston and Siraj, 2017; Maynard et al., 2010; Taylor et al 2015).

Figure 5.6: Perceptions of the extent to which principles related to the way practitioners work are embedded



n=248 to 251 to the question: 'Thinking about the ways that Foundation Phase practitioners work in this school, how many:'

■ All or most practitioners ■ Some or very few practitioners

Given the additional guidance materials provided and the fact that the policy had had ten years to embed, these variations may seem surprising. While it is unclear from the survey how they may manifest in practice, the 2016/17 annual report by Estyn observed that FP practice in many schools had become more formal again (Estyn, 2017). The 2019 survey therefore questioned practitioners about this and the findings suggest this was the case in the majority of schools. For example, 54% (n=287) of respondents indicated that 'after initially trying active and experiential learning in Year 1 and 2', their school 'had reverted to approaches that are more formal'. The reasons for this were not explored in the survey, but the findings are nevertheless important since they appear to add weight to the possibility that the FP is not being enacted as designed in a significant number of schools. If this is the case, it makes it difficult to attribute any observed achievements under the programme to its sophisticated pedagogical design. Furthermore, if the programme is not understood and enacted as pedagogically intended, this impacts its ability to realise its aims and the conclusions that can be drawn in this research. It is therefore important to explore why practice may not be aligned with the intended curriculum, especially when so many practitioners appear to favour it. The next section aims to help here.

Expressed levels of difficulty engaging with intended pedagogies

Rather than assume that the cause of such variation was practitioner knowledge, the 2019 survey explored how easy practitioners felt it was to enact the pedagogical principles. Fullan and Pomfret position the degree of complexity or difficulty of enacting a curriculum innovation as 'vital' to its success in implementation terms and some propose this can be measured as perceived complexity by potential users (1977, p.368). They highlight the importance of adaptations to the conditions that facilitate curriculum change, such as physical conditions, spatial arrangements and organisational changes in roles and role relationships. Therefore, if teachers express difficulty enacting specific elements of the approach, this may signal a shortfall in certain conditions that the curriculum depends on or suggest weaknesses in the curriculum's design. Furthermore, significant variation in expressed difficulty might also imply significant variation in practice. The following three figures therefore summarise the survey responses for the three main principle areas that relate to the child (Figure 5.7); the environment (Figure 5.8) and the practitioner (Figure 5.9). Again, response categories were collapsed for ease of interpretation. 'Very difficult' and 'quite difficult' were collapsed into 'difficult' and 'very easy' and 'quite easy' were collapsed into 'easy' (see Appendix N for non-collapsed data).

The data suggest that practitioners do indeed vary in terms of how easy they feel it is to engage with the FP's various pedagogical elements. While the principles related to how children learn (Figure 5.7) appear easy to enact for most, the data suggest that in roughly a quarter of schools, practitioners found it difficult to ensure that children were appropriately challenged and supported by adults and the environment to facilitate good progress. This seems to be a significant number some ten years on from the programme's introduction. Even more practitioners expressed difficulty enacting the environmental principles (Figure 5.8), with over a third of respondents reporting difficulty enacting most elements. This may point to the material limitations of school buildings themselves which pre-date the FP policy. Indeed, 'existing buildings and facilities' were one of the most widely reported obstacles to enactment (illustrated later in Figure 5.10) with 62% of practitioners still indicating these were obstacles in 2019 (n=289).

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A third of practitioners also considered providing access to resources that enable choice and independence in learning difficult. This is not necessarily linked to the building fabric and could therefore be a resourcing issue in some schools. Significant variation was also observed in perceptions of how easy it was to realise the principles related to the practitioner (Figure 5.9), especially engaging each child in sustained shared thinking (e.g., working together with the child to solve problems, clarify concepts, extend a narrative), with over a third of respondents expressing difficulty here. This was followed by engaging families/carers as partners in children's learning, for which a third of practitioners described difficulty.

That so many practitioners perceive difficulty enacting key elements of the curriculum's pedagogical design is a little concerning. The implications are that this may impact their pedagogical engagement and the data suggest this might be the case in some schools. Substantial correlations were found between level of perceived difficulty and reported enactment of pedagogies (see Appendix O), and a particularly high correlation was found when a total score was calculated to reflect how easy practitioners felt it was to engage with the pedagogies overall and another for the extent to which practitioners reported they were enacted overall in each school (r_s =.936, p<.001 based on 238 observations). This finding indicates that where practitioners felt pedagogical enactment was easier, they were more likely to report greater engagement within their schools (although causality cannot be established from this data). It is therefore important to consider a few of the potential reasons why some might find it difficult to engage with the pedagogical approach, and how this may have changed over time. This is the focus of the next section.





* n=246 to 248 to the question: 'how easy is it to ensure the child:'

Figure 5.8: How easy practitioners feel it is to realise the following environment related principles in practice



Figure 5.9: How easy practitioners feel it is to realise the principles related to how practitioners work in practice



n=245 to 248 to the question: 'how easy do you think it is to for Foundation Phase practitioners to:' SST = 'Sustained Shared Thinking'

5.4 Obstacles to greater pedagogical engagement and changes in perceptions over time

To understand the difficulties that some practitioners expressed enacting the curriculum and how practice may have changed since the early research, the survey investigated some of the centrally positioned obstacles to the FP suggested by Taylor et al. (2015) and whether perceptions of them had changed over time (Figure 5.10). This section therefore considers some of the obstacles to greater pedagogical engagement and differences in perceptions between the two surveys.



Figure 5.10: Particular obstacles to enactment experienced by schools

Adult to pupil ratios, funding, and resources

The research literature suggests that personnel to perform new roles may be a necessary structural alteration to support curriculum reform (Fullan & Pomfret, 1977). This is particularly relevant in the FP which is predicated on higher adult:child ratios than the curriculum it replaced. For instance, higher ratios are crucial to supporting the adoption of a range of roles including the provision of a balance between formal and informal learning located both indoors and outside. For example, the policy guidance advises that practitioners should aim to achieve a balance of child-initiated and adult-directed activities, using continuous, enhanced, and focused provision, providing a mixture of direct teaching, and observation, support, and extension during children's play, ensuring children 'experience a variety of learning and teaching styles' (Estyn 2017, Welsh Assembly Government, 2008c;

Welsh Government, 2015b, p.5; Welsh Government 2016a). These ratios are therefore crucial to a practitioner's ability to enact the programme's intended pedagogical approach. However, comparisons of the 2012 and 2019 survey data suggest that adult:child ratios had worsened in all years and that schools had become less able to meet the recommended levels. In 2012 for example, the average number of children per adult in nursery and reception was 9.35, compared with 10.4 in 2019²¹. For years 1-2, the average number of children per adult was 11.9 in 2012, compared with 13.8 in 2019. While the data is derived from different samples of teachers, it provides a rough indication of a general worsening, which supports anecdotal accounts from practitioners more generally. This finding is particularly significant, since any worsening of ratios is likely to impact on practitioners' enactment of the adult-intensive elements of the policy described above. To this end, respondents were asked about changes to adult:child ratios in the FP in their schools over the last five years. Their responses corroborated the findings above, as 67% of Lead Practitioners indicated that they had worsened (n=289), and perhaps more worryingly, 86% of these practitioners reported this had had a negative impact on how they delivered the FP (n=193).

These findings are reflected in differences in respondents' perceptions of obstacles to enactment between the two surveys (Figure 5.10). In 2012 for example, 31% of respondents positioned achieving the recommended ratios as a particular obstacle to enactment, but in 2019 the figure was almost double, at 61%. Furthermore, in terms of the 'single biggest obstacle', only 1% of respondents felt this was achieving the recommended ratios in 2012 but by 2019, 15% of respondents felt this to be the case. In terms of a proportionate increase, this is enormous and positions it as the second most widely reported '*single* biggest obstacle' to practice. While it is acknowledged that the data are drawn from different samples, the differences are substantial and signify the importance of these ratios to the curriculum's design; a worsening of ratios over time; and potentially, an impact on the ability of practitioners to enact the pedagogic intentions of the curriculum in some schools. This might even explain the reported reversion to using more formal methods in the FP.

²¹ The ratio questions in the two surveys were worded differently; the 2012 survey yielded ratios for nursery, reception, year 1 and Year 2 classes separately, whereas the 2019 survey had one question about ratios for nursery/reception and one for year 1/2. Therefore, a combined average is used for the 2012 survey.

The FP also has higher material needs than its predecessor, involving the provision of wellresourced learning environments and the funding of experience-rich learning. Figure 5.10 illustrates that funding and resources remained the most widely perceived obstacle to enactment, with 75% of respondents reporting this in 2019 (slightly higher than in 2012). Furthermore, the proportion of practitioners identifying funding and resources as the single biggest obstacle had increased from 33% in 2012 to 53% in 2019. This is another substantial increase and, considered alongside the data on ratios, illustrates how essential practitioners perceive resources to be to their ability to enact this type of curriculum. Together, the data suggest then that funding and resources, essential for achieving recommended adult:child ratios central to engaging with the intended pedagogical approach, have become a significant obstacle to enactment in the majority of schools. These results are significant and likely to explain some of the reported difficulties enacting the curriculum described in the previous section. The concern is that they may have impacted practitioners' engagement with the intended pedagogies and therefore children's experiences of learning in the FP in some schools.

Understanding and awareness

While practitioner knowledge and understanding of a new curriculum and its intended pedagogical approach is important to its enactment (Fullan et al., 2008; Priestley & Minty 2013), weaknesses identified by Siraj and Kingston (2014) and Taylor et al.'s (2015) early research were perhaps unsurprising given how different the FP was from its predecessor. However, given the significant time elapsed and range of additional guidance materials and pedagogical principles published, it is important to consider whether pedagogical understanding had improved or potentially, remained an obstacle to practice. To explore this, the survey asked if respondents were familiar with or had used some of the key resources developed for this purpose. If practitioners had consulted the resources and were familiar with the Action Plan's explicit pedagogical principles, it is possible that their understanding of the range of pedagogic strategies unique to this curriculum would have improved which may have led to better engagement with the intended curriculum by practitioners. That said, it is acknowledged that teachers have the capacity to subvert curriculum policy, especially if it does not align with their own beliefs, and while this is not considered here, it is discussed in the following chapter.

Most practitioners were familiar or very familiar with the FP Action Plan and the pedagogical principles within it. Furthermore, almost 70% of practitioners reported that this had a positive (50%) or very positive (19%) impact on how they enacted the programme. However, just over a quarter of respondents indicated they were only vaguely or not at all familiar with the Plan and FP principles. Furthermore, the data suggested that almost half of LPs (48%) were not aware of the online FP resource exemplifying many of the pedagogical elements discussed above. The implication is that some pedagogical knowledge gaps may still exist, and that the pedagogical principles and priorities set out in the Action Plan might not be at the forefront of practice in a significant number of schools.

Interestingly, 42% of practitioners felt that 'adjustment of staff' was an obstacle to practice in 2012. While this might be expected shortly after a new curriculum is introduced, especially one with such a sophisticated and new pedagogical design, in 2019 more than a quarter of respondents (26%) still felt this was the case. This was intriguing, since it was unclear what adjustments might still need to be made this much later, especially given all the additional guidance materials and resources. It is possible that knowledge and experience-based issues remain, or that other professional dynamics were at play. The survey findings related to 'clarity' about the FP were even more surprising. In 2012, 57% of practitioners positioned clarity as a particular obstacle to enactment (Figure 5.10). It was anticipated that this would have improved as a result of all the additional guidance and resources, but the majority of respondents (52%) still felt this was the case in 2019. This is another intriguing finding, since it was unclear why clarity should remain problematic this far on. A lack of clarity suggests uncertainty about the curriculum which again has the potential to lead to different enactments. While the survey did not explore 'clarity' further, it did consider how other educational directives introduced after the FP was rolled out aligned with the programme and their potential impact on its enactment.

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Impact of national policies and frameworks

The policies and directives of interest include the new Estyn school Inspection Framework; establishment of Regional Consortia (who monitor, support and work with schools to raise standards to improve education in their regions); categorisation (where schools are colour coded according to their pupil attainment data); annual national tests in reading and numeracy (undertaken in Years 2-9), the Literacy and Numeracy Framework (LNF); Digital Competency Framework; FP Profile; and the FP Action Plan. Teacher assessments at the end of the FP are also considered here since the full impact of these assessments on enactment had not had sufficient time to take effect when the early FP research was undertaken²². It was assumed that if these policy initiatives were seen to conflict with the FP's pedagogical and philosophical approach, practitioners may adopt other approaches seen necessary to meet the demands of these directives instead. Any tensions between the aims, objectives, and how progress is measured in these policies and the FP may also impact clarity about the appropriate direction of practice in the FP and contribute to its position as a significant obstacle for so many.

Views of the impact of these policies and directives on how the FP is enacted are summarised in Figure 5.11 below. In the figure, the response categories 'very negative' and 'slightly negative' have been combined and likewise, 'very positive' and 'slightly positive' are merged to simplify the presentation and interpretation of the data (see Appendix P for non-collapsed data). Of most note, is the impact of national testing, with 81% of respondents indicating this was negative (for 52%, it was *very* negative). This clearly suggests a widely perceived incompatibility between the FP and the national testing policy, although how this was manifest in practice was not explored. The categorisation of schools (by Regional Consortia) was also widely positioned as having a negative impact on enactment, with 46% indicating this was the case. However, unlike the national tests, a third of practitioners saw no impact on the FP from this policy, and just under a fifth saw a positive one. The data therefore suggest that the way schools experienced categorisation may have been different. Similarly, the impact of the end of year teacher assessments (which are reported to the Regional

²² The Foundation Phase was not fully rolled-out across all years until 2012.

Consortia and inform both categorisation and school inspection judgements) were seen to have a negative impact on enactment by just over a third of practitioners, but for 45% it was positive. This inconsistency is interesting and may suggest tensions in views about the best ways to measure FP outcomes.

A significant split in opinion was also identified over the impact of the Estyn Inspection Framework and the Regional Challenge Advisor. For example, 30% of respondents reported the Inspection Framework had a negative impact while for 38% it was positive. To a much lesser extent, disparities were found in views of the impact of the LNF and the DCF, as despite most practitioners denoting a positive effect, a significant minority felt it was negative (16% and 13% respectively). In contrast, the FP Action Plan and Profile were seen to have a positive impact on enactment by a significant majority of practitioners, with few (10% or less) indicating a negative one. This is suggestive of greater policy alignment between these initiatives, and the FP compared with the other policy directives, perhaps because these are the only two policies that were specifically designed for and limited to the FP.





Contextual factors specific to individual schools

Interestingly, the data suggest that there is also something about the particular individual context in which practitioners work that differentially impacts their ability to engage with certain pedagogies. Differences in the way senior leaders allocate resources for adult-to-child ratios are perhaps implied by the variation in responses to worsening ratios depicted earlier and meeting the recommended ratios illustrated in Figure 10.9. Likewise, differences in the material limitations of school buildings and facilities are evident in the data suggesting they remain an obstacle for almost two thirds of respondents, but not for a third. But in 2019, a quarter of practitioners also positioned 'other things happening within this school' and the 'particular needs of children within this school' as particular obstacles to enactment (Figure 10.9). While the picture was similar in 2012, the percentage of respondents indicating the needs of children in the school had increased from 17% to 25%. Furthermore, almost a quarter of respondents (22%) positioned 'behaviour' and 13% placed 'poverty' as obstacles to enactment in 2019²³. These are particularly interesting findings, since it is unclear why the needs of children in some schools, or behaviour, or indeed, why poverty would make a certain curriculum harder to enact and, moreover, why this view may have become more widespread over time.

Other factors that are local to individual schools are perhaps easier to understand in terms of what their impact on enactment might look like. As mentioned earlier for example, one of the explicit pedagogical principles of the FP is to actively engage parents or carers as partners in their children's learning. However, if positioned as an obstacle to practice (which it was for almost a quarter of practitioners in 2019), parental engagement is likely to be less widespread in these schools. It is possible that schools may vary in their capacity to engage parents. Consequently, this and some of the other obstacles local to particular schools may impact practitioner engagement with the intended pedagogical approach and, potentially explain some of the variation in perceptions of difficulty and enactment described in section 5.3. Finally, it is perhaps unsurprising to note that only 2% of 289 respondents reported not experiencing any obstacles to enacting this pedagogically sophisticated and demanding

²³ 'Behaviour' and 'Poverty' were not included in the 2012 survey therefore time-based comparisons cannot be made.

curriculum. Indeed, taken together, the data suggest that many contextual dynamics get in the way of the enactment of this curriculum, despite the ten years it had been in place.

5.5 Chapter summary

This chapter has examined practitioner views of the FP and how these have changed over time, by reflecting on data gathered at two time points, seven years apart. It has drawn on the results of a national survey of FP Lead Practitioners in 2019 and a survey of headteachers and Lead Practitioners undertaken by Taylor et al., in 2012 (see Taylor et al., 2016a). In contrast to the previous chapter's focus on teacher assessed attainment data recorded at the end of Year 2, this chapter adopted a broader perspective by exploring practitioners' views of the programme's impact on a wider range of outcomes and schooling domains, and considered issues linked to its enactment and factors that might have impacted this over time.

The findings suggest general support for this curriculum continues and the view that it positively impacts numerous outcomes and schooling domains has become more widespread. As was the case in 2012, the most widely perceived benefits related to pupil well-being and attitudes to learning. However, proportionately fewer practitioners saw a positive impact on attainment gaps, with less than half noting one by 2019. This finding may be unsurprising given the slowing of progress and limited impact on absolute attainment gaps observed in the previous chapter. However, it does seem at odds with other survey findings such as the higher proportion of respondents who felt the FP particularly advantaged pupils living in poverty in 2019, especially since the picture for other groups was largely unchanged. These findings therefore suggest that some practitioners may conceive advantages for this group of learners that are broader than traditional attainment in literacy and numeracy measured at the end of Year 2.

Variations were observed in both reported enactment and difficulty engaging with the curriculum's pedagogical design. This suggests that significant disparities may still exist in practice. While much of the variation seen in early observations of practice might relate to weaker pedagogical understanding and the newness of the curriculum, the data in this

research, the amount of time that has since passed and the provision of extra guidance suggest that other factors associated with a range of material, local and external dynamics of practice may play a greater role. Many teachers reported a worsening of adult:child ratios, which impacted the ability to enact the curriculum as intended and funding and resources appeared more problematic to respondents in 2019. This may explain some of the reported reversion to more formal pedagogies observed in many schools. However, the 2019 data suggested that for some practitioners, certain characteristics of their schools and respective catchments were significant obstacles to enactment and a range of wider conflicting educational policy agendas impacted practice too. These may explain why 'clarity' remained an issue for so many.

Taken together, the findings suggest that teachers' perceptions of many aspects of the FP vary and that a range of tensions exist. The main implications are that these may lead to significant differences in enactment and different learning experiences for pupils across Wales. At the same time, they impact the ability to judge the extent to which the attainment patterns identified in the previous chapter can be attributed to the policy's philosophical and pedagogical design. This requires further investigation. Therefore, the chapter concludes by highlighting a range of tensions that the data suggest warrant further exploration in the final chapters of the thesis.

First, the curriculum has been in place for ten years and practitioners supplied with explicit guidance on its enactment, yet clarity remains an issue for most. Why this is so and the way that it impacts practice remains unclear. Second, some but not all practitioners believe the end of FP teacher assessments have a negative impact on enactment. This suggests tensions between the aims, pedagogy, and perceived outcomes of this curriculum, and how they are measured. Third, this theory is reinforced by the identification of potential conflicts between the FP and some wider educational policies, raising questions about how the aims and outcomes of this curriculum are understood and measured, and indeed, how this might affect practice.

Fourth, a disjuncture is apparent between the more widespread practitioner confidence that the FP especially favours pupils from disadvantaged backgrounds and a decline in faith in its
ability to narrow gaps in attainment. This raises questions about why so many think pupils affected by poverty are advantaged, especially given the limited impact on gaps in measured attainment, and how this might relate to enactment. Finally, the data imply a tension between the FP and specific characteristics of some schools, raising questions about how school context can present obstacles to the enactment of a curriculum for some but not others. The analyses of the teacher and headteacher interviews presented in the following chapter will address some of these issues and help to fully answer the research questions of the thesis.

Chapter Six: Teacher perspectives of Foundation Phase outcomes and enactment

6.1. Introduction

The research aims to understand the impact of the Foundation Phase (FP) on pupils from disadvantaged backgrounds. So far, the thesis has highlighted a number of issues that warrant further investigation. Chapter Four suggested that the programme's impact in mitigating educational disadvantage when measured by poverty-based gaps in attainment at the end of Year 2 had been limited. Yet Chapter Five identified a widespread perception among teachers that learners from disadvantaged backgrounds especially benefit from this curriculum. The contradictory findings of the two chapters suggested possible tensions in how achievement and outcomes in the FP are understood and measured, which inevitably may have implications for how it is enacted in schools across Wales. This hypothesis was reinforced by teachers' differing perceptions of how easy it was to engage with the pedagogical approach, extent to which they did so, and the differing patterns of school-level improvements in measured attainment and progress towards closing attainment gaps. A number of tensions between the intended approach and its realisation in practice were implied by the data including perceived conflicts with other educational policies, poverty and the behaviour and 'particular needs' of learners in some schools. It is crucial to explore these issues in this last empirical chapter, in order to better understand the impact of this curriculum and its relation to disadvantaged learners.

As described in the Methodology, the research adopted a case study approach for this purpose taking advantage of rich process data obtained from a national sample of primary schools by Taylor et al. in 2012 (see Taylor et al., 2015). The chapter draws on this data and that arising from practitioner interviews undertaken for this research in seven case study schools drawn from Taylor et al.'s sample. It investigates the tensions identified so far through a focus on how the FP is enacted by practitioners, according to accounts they provide of their practice during interview. A particular focus is given to the enactment of the FP in relation to children from disadvantaged backgrounds and exploring how achievement, outcomes and impact are understood by those responsible for enacting the programme. As

such, the chapter helps to provide important contextual information from which to understand how the FP has been understood and enacted, and its impact on outcomes. Specifically, the chapter addresses the following research questions:

- How do teacher interpretations of the FP relate to attainment, other educational outcomes, and perceptions of equity?
- How is enactment of the FP related to measured outcomes during the study period?

These questions are investigated through an analysis of the interviews using a lens that draws on enactment theory (e.g., Braun et al., 2011; Priestley et al., 2012). The analysis is based on interview data of 21 teachers including three headteachers, eight FP Leads and ten FP class teachers in seven case study schools (see Chapter Three for more information). It also draws on the administrative data discussed in Chapter Four (which provides the particular situated or local context of the case study schools), the Lead Practitioner Survey findings presented in Chapter Five and detailed case study data derived from pedagogical observations by Taylor et al. in their evaluation of the FP (2015).

The chapter loosely draws on the heuristic developed by Braun and colleagues to assist with understanding policy enactments within education (e.g., see Ball et al., 2012; Braun et al., 2011). This heuristic relates to four interlinking contextual dimensions (situated, material, professional and external contexts) which are used throughout the chapter. The first section summarises the local, or what Braun et al. (2011) term, the situated context of each school. This includes prior engagement with FP pedagogies, cohort characteristics and basic patterns of attainment over the study period which informs the following section that explores the relationship between patterns of attainment progress and descriptions of pedagogical practice in each school. This addresses the second research question above. Next, a deeper understanding of enactment is sought, through the analyses of teacher discourse about the FP. Here, particular attention is paid to how teachers recontextualise and respond to the FP (i.e., imagine, interpret, contextualise, and translate it into practice), and the way in which achievement, outcomes, and benefits for learners from disadvantaged backgrounds are framed²⁴. While the focus in this section is on the influence of individual values, experiences

²⁴ The term 'outcomes' is predominantly used in the chapter to reflect a broader understanding of achievement while 'attainment' is used to reflect a narrower, more academic one.

and philosophical beliefs (what Braun et al., 2011 include under the banner of the 'professional' dimension of practice), the next section reflects on the 'external' context of enactment (Braun et al, 2011), which includes the impacts of interpretation at and pressures from the meso- and macro-level (Priestley, 2021), and related policy tensions suggested by the previous chapters. This leads to a consideration of material and situated issues such as school buildings, facilities, resources, budgets and staffing levels (see Braun et al, 2011) which the data suggest can have a particularly significant impact on the curriculum's enactment in schools serving disadvantaged communities. The chapter concludes with a summary of the main findings.

In the reporting of results, 'practitioner' simply denotes an interviewee in any of these roles (i.e., headteacher, FP Lead or FP teacher); role is only distinguished where it is considered pertinent to the illustrative point. As neither the particular school nor teacher status/role were found to have a bearing on practitioner narratives, they do not feature heavily in the discussion of the findings. The analysis proved for example that in most instances, there did not appear to be a discernible relationship between the situated context of the school and its attainment progress. Similarly, the status of the interviewee did not appear to have a bearing on the findings. Therefore, aside from an explicit discussion of the values of senior leaders, role does not feature in the discussion or organisation of this chapter. Similarly, after the following section, little reference is made to the school's contextual information, particularly in terms of attainment and attainment gaps, unless particularly relevant to the data being discussed. This helps to avoid distraction from the central narrative of the chapter. Aside from the headteachers, all practitioners were FP classroom teachers as opposed to classroom assistants (often referred to as 'TAs'). Pseudonyms are used for both schools and practitioners.

6.2. The case study schools

The case studies were particularly useful for increasing the granularity of the analysis, particularly through facilitating an in depth focus on the tensions identified and their relation to disadvantaged learners. The case studies were drawn from Taylor et al.'s sample using information relating to attainment, cohort characteristics (including number of pupils eligible for free school meals on roll) and the pedagogical practice observed in Taylor et al.'s evaluation (2015). Summarising this background information or what Braun et al., (2011), call the situated context of each case study used is also necessary for understanding the background to where each practitioner interviewed was from and for examining the relationship between changes to practise and attainment, one of the benefits of the research design.

Detailed attainment data for all case study schools over the study period forms Appendix Q. However, an overall summary of the key patterns in the attainment of pupils eligible for free school meals (FSM) and attainment gaps in Mathematical Development and Language Literacy and Communication for each school is presented in Figure 6.1 below. The figure illustrates the central differences between the schools in measured attainment and patterns over time using the combined data for the two time periods of the research described in Chapter Four. The schools represent a range of attainment and attainment gaps at Time 1 (T₁) and various degrees of progress in terms of improvements in these by Time 2 (T₂). They also represent a wide range of pedagogical practice observed by Taylor et al. in 2012, with the 'FP scores' in the figure representing a snapshot of pedagogical practice at one time only (please see Chapters Three and Four for further details). Such widespread variation provides a suitable basis to further explore how teachers recontextualise the FP and how this relates to learners from disadvantaged backgrounds.

Table 6.1 illustrates that all schools except for Maycroft (recruited in the second post COVID phase), had above average numbers of pupils eligible for FSM during the study period, and many had significant numbers of pupils with Special Educational Needs (SEN). However, at the time of interview, the number of FSM eligible pupils at Maycroft had increased significantly to 36%, which means the FP Lead (FPL) was speaking from greater experience than the T₁ and T₂ figures might suggest. Another point to consider when interpreting the data is that Heathbrook have exceptionally high numbers of EAL learners (roughly 50%) and the FPL explained that many more pupils were from impoverished backgrounds than

indicated by the eFSM indicator²⁵. Hence, improvement in absolute attainment in this school is considered to include a substantial number of pupils from disadvantaged backgrounds, not represented by the eFSM measure, and this contributes to the school's position in the improved attainment group in Figure 6.1. The situated data presented in this section will be drawn upon in the next section, which explores the relationship between pedagogy and attainment.

		Improved			Worsened		
	Cartref	Cartref Heathbrook		Dalestowe	Bracken Way	Maycroft	Maes Bach
	\downarrow	\downarrow	\downarrow	\checkmark	\checkmark	\downarrow	\downarrow
FP Score	Very High → Rank 4	Medium Low Rank 21	Medium Low Rank 27	Medium High Rank 17	Very Low Rank 30	Very Low Rank 36	Very High Rank 7
T ₁ FSM Attainment	→ Very Low	Medium Low	Low	Medium High	Very High	Very High	Medium High
T ₁ Attainment Gaps -	→ Large	Medium	Large	Small	Small	Small	Small
Change in FSM Attainment	Large → Improvement	Improved	Large improvement	Improved/ Mixed	Worsened	Similar/ Worsened	Worsened
Change in Attainment Gaps -	Large → Improvement	Similar / Mixed	Large improvement	Mixed	Similar	Similar/ Worsened	Worsened

Кеу					
FP Score	The Foundation Phase (FP) Score indicates the extent to which schools embraced FP				
	pedagogies during observations made in 2012 by Taylor et al. Schools were ranked				
	between 1, the most closely aligned to the FP, and 36, the least (Taylor et al., 2015).				
$T_1 eFSM$	Average attainment of pupils eligible for FSM for the first time-period (based on the T_1				
Attainment	combined cohorts 2011/12 to 2013/14) compared with schools nationally				
T1 Attainment	Average eFSM-based attainment gaps for the first time-period (based on the T_1 combined				
Gaps	cohorts 2011/12 to 2013/14) compared with schools nationally				
Change in eFSM	General nature of change in FSM eligible pupil attainment using the relative difference in				
Attainment	school positions between the two time-periods of T_1 and T_2 (T_2 = 2014/15 to 2016/17).				
Change in	General nature of change in eFSM-based attainment gaps using the relative difference in				
Attainment Gaps	school positions between the two time-periods T_1 and T_2 (T_2 = 2014/15 to 2016/17).				
Derived from administrative pupil outcome data between 2011/12 and 2016/17 Appendix Q					

²⁵ The issue of working poverty and the limitations of eFSM as an indicator of deprivation is highlighted by others (e.g., see Gorard, 2012; Taylor, 2018) and the Child Poverty Action Group (2020) estimated 2 in 5 UK children under the poverty line are not eligible for FSM.

	Year 2 cohort size		% eligibl	e for FSM	% registered with SEN		
	T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	
Cartref	43	49	42	34	72	45	
Heathbrook	29	30	43	27	33	29	
Llanover Fawr	27	27	21	27	23	28	
Dalestowe	29	18	50	48	15	26	
Bracken Way	32	27	35	33	55	59	
Maycroft	49	58	12	8	12	8	
Maes Bach	15	14	52	34	48	45	

Table 6.1: Case study school contextual information derived from combined T_1 and T_2 cohort data averages

6.3 Changes in pedagogy and the attainment of learners from disadvantaged backgrounds

This thesis acknowledges that traditional, measured attainment is only one of many outcomes of this curriculum and a narrow focus on this may undersell broader achievement in the FP. However, Power et al. (2019) suggested that pupils from impoverished backgrounds stood to gain less from the programme in terms of measured attainment than their more advantaged peers and from a social justice perspective, this is important to explore. Given this, the policy's ambition to narrow attainment gaps, and the suggestion in earlier chapters that pedagogical engagement and patterns of attainment progress are uneven, it is important to investigate the relationship between this curriculum's pedagogical approach and the attainment of learners from disadvantaged backgrounds. Acknowledging the uncertainty over how and when attainment gaps are expected to narrow, this section attempts to explore whether the policy's pedagogical design and focus privileges the attainment of pupils from disadvantaged backgrounds by the end of Year 2 (other FP outcomes are considered in the section that follows). In the absence of classroom observations, one way of examining this is to consider teacher accounts of change in their practice in terms of its alignment with the curriculum's design, together with changes in the Year 2 attainment of pupils eligible for FSM. This section summarises the findings using the data for the case study schools.

The patterns of attainment summarised in Figure 6.1 and teacher discourses from the interviews were considered alongside each school's FP score to see if there was any suggestion that greater alignment with the intended philosophy and pedagogy of the FP (i.e.,

the curriculum's design), might lead to appreciably improved attainment for pupils eligible for FSM by the end of Year 2. The data suggested that significant change in pedagogical approach and notable changes in attainment transpired in two schools between the two study periods (Cartref and Heathbrook). Teachers at these schools depicted a significant and conscious departure from the philosophy and pedagogies of the intended curriculum to a focus on attainment in core curriculum areas (the cause of this is explored later in the chapter). The changes were described as occurring during the study period and in both schools and involved an increase in formality and narrower focus on traditional outcomes. This coincided with notable improvements in each school's attainment data and at Cartref, significant progress towards narrowing attainment gaps. The findings therefore suggest that while pedagogy aligned to the FP might realise broader outcomes, traditional structured approaches which are anathema to FP philosophy were more likely to raise attainment when considered more narrowly or traditionally. Indeed, some of the teachers themselves at these schools associated improvements in Year 2 attainment with the change of pedagogical and curriculum focus.

While Llanover Fawr appeared to experience significant improvements in attainment and attainment gaps during the study period (Appendix Q), its teachers didn't describe any explicit changes to pedagogy or curriculum focus that these could be attributed to. Instead, they referred to other factors influencing provision over time, including general fluctuations in staffing and resources, and multiple changes in headships and respective understanding of the FP and resource allocation. However, practitioners did not explicitly or implicitly relate these factors to improvements in measured attainment. The FPL's account suggested that one headteacher appointed during the study period completely understood the FP and its material needs, and it is possible that this may have increased the breadth of provision and alignment with the intended curriculum since it loosely coincided with observed improvements in attainment, but she did not attribute improved attainment to this. Without more nuanced information about the timing of changes and exactly how they impacted enactment, it is difficult to draw conclusions from this case study.

One practitioner at Dalestowe Primary suggested that their improved attainment at higher levels (evidenced in Appendix Q) resulted from an increased focus on 'challenge,' 'impact'

and 'standards' in the school, and an increased focus on literacy and numeracy introduced with the Literacy and Numeracy Framework (LNF). However, the school's other attainment data was mixed and no further significant or delineable changes in enactment or explanations were conveyed. Indeed, the only change that seemed common to all school accounts was the reduced resourcing for FP or worsening of ratios, substantiating the survey findings of the last chapter. Otherwise, no coherent pedagogical change or progression over time could be identified in any of the remaining schools that might explain their attainment data or enable conclusions to be drawn about the relationship between the intended design of this curriculum and attainment. Neither did teachers in these remaining schools articulate a clear link between their pedagogical practice and pupil attainment or attainment gaps, aside from the explanation given by Marcross Primary's FPL for their retention of a more formal approach (borne out by the school's very low FP score), justified in terms of maintaining high levels of attainment.

It is interesting that so few relationships were found between the interview accounts of practice and changes in attainment, and that little sense of pedagogical progression was voiced that might reflect an evolution or development of the FP as an educational approach. Instead, teacher discourse suggested two trends. At Cartref, Heathbrook, and Dalestowe, the adoption of a narrower curriculum focus or more formal, traditional approach appeared to lead to improved attainment. However, at Llanover Fawr, Bracken Way, Maycroft, and Maes Bach, changes to attainment in either direction could not be directly ascribed to changes in pedagogy or focus. Instead, the FP in these schools was described as tweaked in response to the individual needs of their cohorts, or staffing and staff-to-pupil ratios, which could fluctuate. It was not linked to attainment. The lack of relationships in this last group of schools might mean that there was not a conscious change of pedagogy or professional recontextualisation, but other, particularly material factors and differences between cohorts (to which some teachers referred), framed enactment instead. However, a relative absence was noted in most teacher accounts of an explicit linking of pedagogy to improved or worsening attainment or attainment gaps, which as the following section will show, perhaps indicates a different understanding of gaps and achievement in the FP.

6.4. The professional context of practice

The described departures in the enactment of the FP from its design in some schools suggests differences in the way that teachers recontextualised it. This also reinforces the survey data that suggested pedagogical enactment varied and that the outcomes of the FP might be understood in different ways. To investigate this and the widespread belief that the FP benefits learners from disadvantaged backgrounds, this section examines how teachers recontextualise the FP, its benefits, and outcomes, particularly with respect to pupils from impoverished backgrounds. This will be explored through an examination of the professional context of practice (Braun et al., 2011), starting at the micro level of the classroom. The section begins with the FP teacher before moving on to consider senior leaders. It explores both the alignment and misalignment of professional values with the intended curriculum and illustrates the agentic responses of teachers and leaders.

Professional values, philosophies, and pedagogical beliefs

Teacher narratives revealed how their professional values, philosophies, and pedagogical beliefs actively shaped their recontextualisation of the FP. For example, the high value attached to the policy was commonly framed in terms of its unique pedagogical features, which for some teachers aligned with their constructivist beliefs:

'You start with the children's interest, you get them engaged for learning, they have hands on experiential real life learning experiences which are fun and engaging for them which they want to do and they talk about and through that they get to learn different skills, they get to learn long life skills which they can use later on in their lives and I think we make sure that it's relevant to them.' (Jen, Cartref)

'When it's done in its truest form, it allows the children to lead their own learning and engage in things that excite them and motivate them.' (Tony, Cartref)

'That child could achieve that skill in a multitude of ways that is engaging ... and suits their method of learning, their preferred learning style.' (Sarah, Cartref) These extracts illustrate what practitioners feel are important and how for them, the FP aligned with their constructivist view of education, and reflected their values and philosophical beliefs. Indeed, the underpinning philosophy of this curriculum aligned with most teachers' beliefs about how children learn, illustrated by the following extract:

'I think the Foundation Phase was, I don't know if revolutionary is the word, but the Foundation Phase was something that a lot of us believed in. I know from teaching practice that it was something that we felt was the right thing, that we felt like as teachers we felt like it was our kind of thing, we always knew, we know that that's the way children learn best.' (Nick, Additional Learning Needs Co-ordinator, Heathbrook)

Nick's account, like those of others, implies a sense of being right that this curriculum aligns with knowledge about the best ways to educate young children. Indeed, at Cartref, Mari claims that she and her colleagues 'know' that the FP's pedagogical approach is 'right', she explains 'it's the right, exciting way to teach', illustrating deep value alignment in addition to rewards for the practitioner.

Professional values and beliefs appear to have a powerful impact on how the programme is enacted. While the above accounts suggest this sometimes meant that practice was deeply aligned with the intended curriculum, at other times, a lack of alignment with professional values appeared to lead to significant deviations, demonstrating the impact of values on the agentic responses of teachers. This is illustrated in a description of change in the FP at Maes Bach following the appointment of a teacher, Jane, who was *'passionate'* about a particular approach to the early-years which appeared to align with the FP. Consequently, nursery and reception became almost entirely child-led, focused group activities were replaced with *'quality interactions,'* and much learning moved outside. Here, we can see how alignment with the professional values and beliefs of one practitioner resulted in a deeper engagement with some of the FP pedagogical principles which was greater than that described in other schools. These changes were driven by a strong conviction about how children learn, including *'the power of learning through play.'* Jane feels like she's *'right about this'* and explains:

'When I came in for example, the children in my class had 5 different books that they were working in, and I was like, but young children don't work in books! Their learning doesn't go on in a book!'

'We all know that children learn through experiential learning, they don't learn through being told something, they learn through doing it'.

Enactment here reflected a professional belief that this curriculum's play-based, experiential pedagogies engaged pupils more effectively. These elements of the FP aligned with Jane's own professional values, as she described going *'even further'* with child-led play. However, she rejected notions of focused groups, a recommended feature of the curriculum (Estyn, 2017) and framed this though a belief in creating *'focused children''* rather than *'focused activities''* (her emphasis). She depicted the speech marks around these phrases manually, visualising her rejection of some of the policy discourse. Indeed, while her descriptions of practice illustrated taking elements of the curriculum that aligned with her values 'further', they also demonstrated a conscious rejection of the recommended features that misaligned with her values. This included the 'balance of practitioner-directed and child-initiated activities' (DCELLS, 2008d, p.10) in the belief that being more child-led was more effective.

Another powerful illustration of an agentic response to a value misalignment is provided by Jess, the FP Lead at Heathbrook. Here, Jess describes *'fighting'* to use the formal literacy scheme that she acknowledges does not align with FP philosophy but believes to be the best approach for her learners. She explains:

'It's not very Foundation Phasey at all. We actually got observed doing a Read, Write, Inc session a little while ago by an area representative whose agenda was FP and it wasn't showing her what she wanted to see, but we fight for it because it makes a huge difference for us. So, even though we believe in the FP philosophy, actually we don't feel our children are well equipped for that.'

Jess's agentic response in the form of a rejection of and departure from the programme's pedagogical approach reflects a misalignment with her values about what works for her

learners. While the explanation, 'we don't feel our children are well equipped for that' suggests this might be based on the *beliefs* of teachers within the school, 'it makes a huge difference for us' suggests that it might be more empirically based. Indeed, the empirical data discussed in section 6.3 appears to lend support for Jess's conclusion, as attainment did indeed improve. Use of the term 'our children' suggests that there is something different about the learners in this school that teachers believe requires a different pedagogical approach. While the proportion of pupils eligible for FSM and with SEN were not remarkably different from the other case study schools (Table 6.1), teachers did refer to a particularly large EAL population and a lack of many fundamental skills which will be explored in section 6.6. This data could explain some of the survey responses that positioned 'the particular needs of learners in this school' as obstacles to enacting the pedagogical approach. Jess's narrative also relates to other data that suggests enactment is sometimes rooted in values about the best ways to educate learners from *disadvantaged* backgrounds. This featured heavily in some discourses and positive framing of the FP. Jane for example explains that because the area is very deprived and pupils have significant learning needs, 'it's much easier' to address them in the moment during self-directed play, 'than pre-planning what to do with them, which would miss out huge chunks of them.' She suggests that the 'more active' nature of the FP, which she translates as 'all about outside learning', suits these pupils 'much better.' However, beliefs like these also contrast with those of some teachers at other schools, again implying differences in how the programme is enacted. Some teachers for instance believe pupils from disadvantaged backgrounds have a greater need for structure or a more formal, directed approach:

'Our most deprived families' children then, they were the ones who really, really struggled with that lack of structure and as soon as we create that structure it calms them. So I would say that I do think it needs a very different approach, I think the structure is important for the children from deprived areas, I think a lot of our learners lack structure at home and they do crave that structure.' (Debbie, Dalestowe).

'I do think our children do benefit sometimes from routine and structure, some of them have such chaotic home lives.' (Lowri, Heathbrook)

'They love that structure... the slightest change in structure and that's the day gone then, they don't know where they're at, what they're doing next.' (Rhodri, Heathbrook)

'I just feel like for children from deprived backgrounds, the more formal approach is where the difference is, and even in the afternoons, a lot of them would have to be guided, even in the more FP style setting.' 'If it had to be FP all day every day? No. I wouldn't feel that would work for our learners.' (Jess, Heathbrook)

These beliefs are manifest in their descriptions of practice which suggest that their enactment is more structured and formal compared with others. Again, this demonstrates an agentic response that subverts the curriculum based on a misalignment of pedagogical beliefs. While these values and beliefs are in tension with the flexible, child-led ethos and philosophy of the FP, the data suggest that they were also manifest in tensions around interpretations of FP outcomes. This will be explored next.

Practitioner interpretations of Foundation Phase outcomes

Professional values and beliefs appeared to shape the interpretation of FP outcomes which was often broader than outcomes represented by traditional academic attainment in maths and literacy, particularly in relation to pupils from disadvantaged backgrounds. The data suggested they included non-academic, softer skills and dispositions, many of which were written into the policy documentation highlighted in Chapter One and positioned by practitioners as particularly relevant for learners affected by poverty and. For example,

'The children get a lot out of it, you know socially, emotionally, for their well-being'; 'obviously it makes them become an independent learner, it gives them the autonomy to make choices for themselves' and 'it...builds their confidence and self-esteem.' (Megan, Dalestowe)

'We've really seen a big improvement in their speech and language.' (Carys, Maes Bach)

'It helps them to become ... better at working together as part of a team,' and 'you get a far better, positive attitude towards learning.' (Andy, Maes Bach)

'It was benefiting the children, it was you know promoting their independence and perseverance skills and everything that you want them to be in a good learner.' (Mari, Cartref)

'It builds their confidence, greatly.'(Debbie, Dalestowe)

While the above extracts illustrate how interpretations extend beyond traditional attainment, positive outcomes were also seen in terms of specific pedagogical features of the curriculum. Teachers often felt certain elements especially benefited pupils affected by poverty. Heather at Dalestowe for example explained, '*You get a far better, positive attitude towards learning from disadvantaged learners because of the opportunities you can give them in FP.*' There is a clear association here between the experiential, constructivist pedagogy and the improved attitudes to learning. Some teachers attached particular importance to the way in which the FP supported personal, social, and emotional development, and the well-being of pupils from deprived backgrounds, while others felt it fostered a deeper understanding of and closer relationships with children. For example:

'It is ideally suited to children from deprived backgrounds because you are able to work more with the children in the moment at their level and also because a lot of what they need is nurture, so I think that by playing basically with the children, you know, a massive amount of what we do in the first term is all personal and social development.' (Jane, Maes Bach)

'It's the language development as well, being able to sit with the children and talk and to listen to them.' (Mari, Cartref)

'Because of the nature of our school we need to look at the well-being of our children, because they're not ready for learning when they come into school. The reason I'm saying that is because the FP philosophy lends itself to that well-being far more than the didactic approach of chalk and talk' and 'It actually gives teachers time to actually work with those children and time to understand where they're coming from, without that pressure of coverage and content and having to get to that standard with these pupils.' (George, Cartref).

The implied focus on these outcomes suggests that the interpretation and valuing of certain outcomes, driven by professional values and beliefs, manifests in their enactment of the FP. The extracts illustrate how teachers reframe the discourse, so that it aligns with their values. This is clearly demonstrated in the extracts below:

'The primary focus should be their social and emotional well-being and that is the steppingstones, the foundations then to start their learning.' (Jen, Cartref)

'That creativity and that talent wouldn't have been identified if we had just strictly been right English, maths, English, maths, English maths, you know, the children have got so many different talents and I think the FP does enable them to nurture those perhaps more.' (Sarah, Cartref)

'Not everyone is academic in the sense of I'm gonna be a mathematician or a writer for things, but you might have an artist or somebody who's really good at drama and go down that route which I think is nice, you know to be able to offer those experiences as well and allow those to grow.' (Megan, Dalestowe)

'It's not all about numbers and maths d'you know what I mean? It's about their creative side, it's allowing them to go off and do what they need to do.' (Elen, FPL, Llanover Fawr)

Not only do the above narratives reframe the discourse to align with the types of professional values and beliefs illustrated in the previous section, but they also frame it in opposition to what some perceive as a narrow, traditional curriculum. In fact, a discourse of creativity was particularly apparent, both in relation to the kinds of pupil outcomes that can flourish in the FP, but also in terms of teacher's ability to follow a child's interests. Their accounts

suggested they prized the opportunity to develop such broader outcomes rather than focus more narrowly on traditional attainment. Interestingly, these broader non-academic outcomes also seemed to relate to conceptualisations of how gaps may have narrowed between learners. For example,

'Maybe it doesn't, I don't know, narrow the gap in attainment, but the purposes, with the focus on well-being, the pupils will be more happy to come to school, they'll learn how to build relationships, they'll learn key life skills, they'll learn through play and they will achieve and they will make their own individual progress, but their progress may not be that they are achieving CSI'²⁶ (Jen, Cartref)

'It's certainly narrowed the gap in the aspect of those children who are coming from poverty and you know that sort of...they're now getting experiences that they wouldn't necessarily have at home so it's allowed for the gap to be narrowed in that sense.' (Anna, Maycroft)

These narratives suggest an alternative, broader understanding of gaps between learners and a different way of framing how they may have narrowed which contrasts with traditional attainment. The suggestion that gaps may have narrowed in broader terms is a view echoed by other practitioners who frame it in terms of access to experiences, opportunities, and resources or some of the non-academic skills described above. The data suggest that practitioners recontextualise or reframe the policy discourse on attainment 'gaps' seen in terms of traditional attainment, which they perceive as too narrow. Indeed, only two practitioners out of 21 interviewed were confident that poverty-based gaps in traditional *attainment* had narrowed in the FP. Most were uncertain and didn't seem to have a more nuanced understanding of differential attainment in these terms, yet they were very positive about the programme's benefit for disadvantaged learners. Indeed, what was especially notable was the *frequency* with which broader outcomes rather than more traditional

²⁶ CSI (Core subject indicator), is a reference to the three subjects in FP that are recorded by consortia for each school, comprising Mathematical Development, Language Literacy and Communication and Personal and Social Development, Well-being and Cultural Diversity.

academic attainment were identified in discourse about the programme's benefits, particularly in relation to pupils from disadvantaged backgrounds.

This is illustrated in Figure 6.2 and Table 6.2 which provide a quantitative illustration of the way in which the beneficial outcomes of the FP (defined as something of consequential benefit to learners) were framed by practitioners. These were derived from teacher responses to several open-ended questions asked of all teachers during interview, including whether they felt any groups of learners had particularly benefited from the FP and their opinions concerning its impact on pupils from disadvantaged backgrounds and related attainment gaps. Teachers were also asked if they felt the benefits of learning in the FP were captured by the end of phase assessments in Year 2 and their opinion of the programme's strengths. The answers to these questions provided key information about their understanding of what were considered as beneficial FP outcomes. Appendix I provides examples of extracts underpinning outcome categories.

The bar frequencies in Figure 6.2 represent the number of different practitioners who referred to each stated outcome, while Table 6.2 illustrates the range of domains that these outcomes appear to be drawn from. It is interesting to note that the most common outcomes were independence, social skills, attitudes to learning and experiences, and aside from language development which might be associated with literacy, that traditional academic attainment such as Maths and English (or literacy and numeracy) were rarely positioned as specific beneficial outcomes of the FP. In fact, only one practitioner explicitly mentioned them in this regard. While a universal assumption that the FP has benefited attainment in maths or reading and writing is possible, their absence in practitioners' discourse about the programme's benefits is interesting. That said, it must be acknowledged that all teachers described tending to these subjects in their daily practice which suggests a focus on them remains despite this.





Table 6.2: Outcome domains of beneficial outcomes

Non-academic Skills	No.	Dispositions	No.	Curriculum feature	No.
Independence	14	Attitudes to learning (engagement/		Experiential/resource rich learning	17
Social skills	12	enthusiasm/enjoyment)	14	Learning through play	11
Speaking/discussion/language	12	Improved well-being/self-esteem/		Multiple ways to access curriculum/	
Sharing and turn taking	9	happiness	8	choice	10
Physical development	7	Motivation and perseverance	8	Small group work	9
Creative development	7	Confidence	7	Active/physical/outdoors	7
Collaboration and teamwork	6			Subject parity/importance of creativ	e
Problem solving and thinking skills	6			subjects	7
Listening	4			Practical hands on	6
Skill transference between subjects	2				

NB: 'No.' = Number of practitioners referring to each outcome out of 21 interviewed.

Figure 6.2 reflects both the essence and complexity of the FP curriculum and its different features. It illustrates how the curriculum is purposely broad in its pedagogical elements, which seem to drive the wide variety of potential outcomes, of which traditional attainment is only one. Indeed, the data suggest it might be an oversight to focus on measured attainment as the only outcome of worth in the FP. This is reflected in the position taken by

practitioners at Cartref, where the headteacher describes 'looking at achievement rather than attainment,' while the FPL explains:

'You can have a child leaving say Year 2 at outcome 4 and think right they're underachieving, but what about everything else, what about all the other things they've achieved throughout the year?' (Mari)

Outcomes are articulated in terms of 'achievement' which, according to these practitioners, captures the 'soft' outcomes not captured in the attainment data. While the analyses suggest that attainment was often perceived to reflect a narrow understanding of achievement in the FP, it is uncertain whether the programme was expected to improve attainment directly by seven years of age or perhaps indirectly lead to greater attainment at a later age. Interestingly, there was an implicit suggestion that for some, the achievement of broader outcomes may assist learning at a later stage, which may include more traditional attainment. Jen for example suggests the FP, 'sets the foundations for their learning,' and Debbie refers to developing 'those building blocks then before they're ready to sit down and do that more structured time'. However, while it was difficult to discern whether other practitioners believed the broader benefits they described would provide resources for more formal learning and greater attainment later or whether they were seen as valuable end points in themselves, the data speaks to the tensions surrounding outcomes highlighted at the start. Furthermore, it also suggests that some valued outcomes of the programme are less easily measurable than traditional attainment.

While this broader interpretation of outcomes is prevalent throughout teacher narratives, there appears to be some variation in how much emphasis is placed on them in practice, again reflecting differences in professional values. At Heathbrook for instance, a clear emphasis was placed on Maths and Literacy in the morning, while the afternoons were described as more *'Foundation Phasey*,' embracing the broader outcomes and pedagogies described above. Jess, the FPL explains,

'The start of reception for me was probably the most formal time of the year, because it was getting them into a routine, it was getting them into a mindset of learning, it was

understanding that there is a purpose to school, and that it is to gain knowledge, it is to get experiences.'

Jess frames 'structure' and 'formal learning' as necessary, because 'ultimately that is how they will be judged'. She explains, 'they'll need qualifications, they will have to do an interview to get a job, so we do have to have the balance of formal things and the nurturing and comfortable environment when they can talk freely'. These beliefs and values appear to contribute to her more formal enactment of the curriculum, at least in the mornings, but also speak to tensions in the aims and pedagogies of the programme. Indeed, there is an implicit suggestion that some teachers see achievement of both types of outcomes difficult. For example,

'The practical problem solving, it's brilliant in the FP, but it's difficult to have the formal work as well, with the standard of you know the writing and the maths and things.' (Arwen, FPL, Bracken Way).

The data therefore suggest perceived tensions between some of the FP's aims and intended pedagogies which may result in differential enactment. It is interesting for instance that the above teacher who identifies this difficulty was from Bracken Way, which had high levels of attainment and a low FP score. This tension is further illustrated at Maycroft, where pressures from a history of *'high expectations'* and *'levels'* of attainment associated both with leadership within the school and its external context (including regional consortia and the parent community), are described as contributing to the *'more formal'* practice adopted. Anna, the FPL explained how staff tended to *'cling'* to formal elements, *'rather than being wholly experiential, you know, play based, to be honest.'* She expands:

'Being pushed to get a certain percentage of children to a certain level, actually takes a lot of that Foundation Phase practice out, because of where you're expected to get them by the end of year 2.'

'The accessibility for that good FP practice then has to be withdrawn in order to be able to get them to those expectations.'

Anna's narrative suggests that the school's translation of the policy is based on a pressure to secure high standards of attainment based on a narrow interpretation of outcomes, which she feels cannot be achieved by FP philosophies and pedagogies alone. Here, both internal and external monitoring appear to frame the recontextualisation of the FP. Again, it is interesting to note that this school had the lowest FP score of all the case study schools evaluated by Taylor et al., (2015). The case is clearly illustrative of tensions in how outcomes are interpreted at different levels of curriculum making. Indeed, micro-level tensions between the values of teachers and senior leaders explored in the following section is one such site, and tensions at the meso-level, explored in section 6.5's focus on the external context of practice, appear to be another.

The values of senior leaders

The data suggest that the professional values of senior leaders can be misaligned with the FP or its teachers. Often, this appears to be due to their greater alignment with values associated with meso-level accountability or the KS2 curriculum²⁷ (themes discussed in section 6.5). An example of these tensions is provided by Debbie, a senior leader originally from KS2 at Dalestowe. She explains,

'I very much felt as I think a lot of Key Stage 2 teachers do, that the children coming through had lost a lot of the basic skills that previously, prior to the FP they would have had.'

These 'basic skills' included 'reading, writing, and more so doing it at length,' which are outcomes that didn't feature much in most other discourse on the FP as illustrated in Table 6.2. Debbie's narrative suggested that her professional valuing of these outcomes impacted her enactment and led to her relocation from KS2 to FP. She claimed,

²⁷ KS2 (Key Stage 2) refers to the upper primary years three to six (ages seven-eleven), that immediately follow the Foundation Phase.

'As much as I love what was happening in the FP, I just wanted to see more of a way that we could bring those skills in alongside it so that when they do come through, it's not such a shock.'

Debbie describes initially modelling practice on that of the previous teacher's, but explains, 'I very quickly realised that wasn't going to work for me.' Her discourse suggested that this led to the introduction of greater structure, formality, and routine, which she put down to 'different teaching styles.' However, the case is illustrative of how a lack of alignment between the FP and the values of leaders can result in modifications that are less aligned with the intended curriculum. It is also reflective of conflicts between the FP and KS2 curriculum, a theme returned to in section 6.5. The FPL at Maes Bach, also described being frustrated by the pressures from senior management. She explained, 'what the battle was previously, was I think coming down from senior management that still wanted the book evidence.' She expands,

'It's very, very difficult when you know they want book scrutinies and want evidence in books and that's not how we practice in the FP...I felt personally that I was kind of stopping the play at aspects because I was under pressure to get evidence into books, which I knew was wrong. I didn't really want to do that practice you know.' (Carys)

Carys's narrative suggests that her enactment was shaped by the value alignment of senior leaders with meso-level external accountability pressures and illustrates how this may impede pedagogically aligned practice. Indeed, Elen, the longstanding FPL at Llanover Fawr positioned headteachers and their understanding of the FP as the 'biggest' factor impacting enactment. But her narrative suggested it could both impede *or* facilitate aligned enactment through the control of resources and to some extent pedagogy. She explained, 'if they're KS2, they don't understand FP' and that one head, 'had no understanding of FP so there was no, there was no money, no staff....it made a huge difference.' But she had experienced other heads that understood and facilitated enactment more closely aligned with the curriculum's design. Indeed, headteacher agency is illustrated by one of the case study heads interviewed: 'In any school you've got a range of staff who are very FP focused, and that suit that FP way of teaching, right the way through to staff who thrive on data, you know they're very data driven and we've got that whole spectrum within the school and it's having that ability to say no, this is the direction of the school and you're either on the bus or you're not.' (George, *Cartref*)

George and Elen's narratives illustrate that where a head's values align with FP philosophy, they have the agency to facilitate more closely aligned practice. This is supported by the very high FP Score attributed to Cartref (Figure 6.1). However, whether this includes the agency to resist external pressures is addressed in the next section, which looks at policy conflict and misalignment in the external context of practice.

6.5 The external context of practice: Policy conflict and misalignment

The accountability framework

While the previous section has shown that enactment is shaped by teachers' professional values and philosophical beliefs, the data also suggests that the ability to fully engage with the intended curriculum may be impacted by tensions between the FP and other education policies that form the 'external' dimension of practice (Braun et al., 2011). As described in Chapter Two, some of these policies were introduced after the FP and appealed to different policy agendas. Indeed, the data suggest that macro and meso sites of activity (Priestley et al, 2021), may have a powerful impact on enactment, and sometimes conflict with the professional values and beliefs of classroom teachers and the principles and philosophy of the FP.

This is perhaps best illustrated at Cartref where articulations of initial practice were closely aligned with the philosophical and pedagogical aims of the FP, evidenced by the school's high FP Score. However, a 'poor' Estyn inspection reportedly had a dramatic impact on practice. Their inspection result was attributed to the narrow criteria against which they were judged and a different interpretation of outcomes to the ones they believed were at the heart of the FP they were delivering. The FPL explains,

'Might the inspector have been from a FP background, you know it could have been a different outcome if they'd understood the FP philosophy...we knew that it was working, but unfortunately Estyn didn't recognise that.' (Mari, Cartref)

The headteacher, George, suggested that the 'ideology' behind their inspection 'was very much results driven, data driven,' but maintains, 'our philosophy was about the well-being of the children.' He depicts a clear misalignment of values with the meso-level and positioned this as necessitating a need to 'withdraw' FP pedagogies 'to fit into almost the chalk and talk style of we need to get our data up.' George also described a 'paradigm shift' in the way staff discussed children, to 'a very narrow, data-driven context'. Teachers at the school referred to a 'data driven period', where 'books sort of became sacrosanct,' through a need to 'evidence' learning. The discourse here then clearly reveals a conflict between the aims and pedagogies of the FP and the values and interpretations of representatives of the wider accountability and assessment framework.

The difficulty of navigating conflicting policy imperatives was illustratively depicted as analogous to trying to '*put a square peg in a round hole*.' George described struggling to both '*hang onto the FP principles.....but then also try to meet the expectations of a test and marrying in the assessment process for an outcome*.' He felt '*attainment*' was an inappropriate measure of standards in the FP and that '*some of the philosophies of the FP don't fit into the attainment process that was being indoctrinated into the school from external agencies*.' Here George identifies ideological conflict between the FP and assessment through the use of the word 'indoctrinated' and this conflict was echoed by some practitioners in other schools too. This included Nick at Heathbrook who maintained,

'I think they really need to think that if they're going to capture this in a good way, they need to think a lot more creatively than looking at the FPI²⁸ and the test results and especially PISA.'

²⁸ FPI refers to the Foundation Phase Indicator, which demonstrates whether pupils achieve the expected level in Mathematical Development, Language, Literacy and Communication and Personal and Social Development and Well-being at the end of Year 2.

This position reiterates the tension suggested earlier in the way outcomes are understood and is reflected in other teacher narratives too. Discourses at Dalestowe for instance suggested practice was similarly driven by pressures from a narrow interpretation of outcomes at the meso-level and Mike, the recently appointed headteacher described the 'huge impact' that 'accountability' had on staff who were 'used to teaching to descriptors and levels and outcomes.' He maintained staff were 'scared' because they were 'battered before, with the there wasn't enough work in the books, there wasn't enough literacy there wasn't enough maths' and that 'rather than focusing on the children and their needs', staff are 'always looking at where they've got to get them to'.

These accounts illustrate that however much professional values and beliefs align with the intended curriculum, they may not always translate into practice and can be frustrated by policy conflicts and value misalignment with meso-level actors responsible for enacting the accountability framework in Wales. But tensions with other policy directives were also apparent that had consequences on enactment of the FP.

LNF and National Tests

While the above narratives appear to explain some of the negative survey responses related to external accountability (such as the inspection framework and categorisation), all practitioners framed the National Reading and Numeracy Tests as completely incongruous with the philosophy and pedagogies of the FP. Indeed, some described having to change practice to '*prepare*' pupils to sit them. Jess, at Heathbrook for instance, explained that when the national tests were introduced, '*Year 2 overnight probably became far more formal and year 1 gearing up to those*.' Many point to the formality associated with the tests and need for pupils to work in isolation, seated, without discussion as incompatible with the FP. Children were described as simply '*not ready for it*'. The FPL (Carys) at Maes Bach explains, '*if we're practicing the Foundation how we should be, children are not going to be used to that test condition, you know, so it's kind of not adding up*.' Jess at Heathbrook describes this conflict for practitioners:

'Teachers were worried about the national tests, and they felt like they were stuck between a rock and a hard place because if they were failing to prepare the children for them, were they failing the children? If they did FP how it's meant to be, that's not teaching to that test, that's not normal, to have to ask a test like that so you know they were torn, they didn't want to teach to the test, but felt like they'd be failing the children and the school almost, because if we got judged on those scores, were they letting the school down? ... would people think their judgement of outcomes was incorrect because of the test scores?'

This extract clearly illustrates conflicts between the philosophies, pedagogies and outcomes of the FP and policies introduced in the external dimension of practice. Teachers at Heathbrook described how the external context could re-frame enactment following the introduction of the LNF too. This was also seen as conflicting with the FP. Nick, for example felt 'the few years after the LNF was introduced the FP got pushed to one side in a big way,' and Jess explains,

'I feel there was a real culture of nothing else matters.' [As literacy co-ordinator] 'I was yes, literacy, literacy and we definitely got more formal throughout.'

'It was book scrutiny, book scrutiny! We went into reception having books and formal learning being evident in books and we have really stepped away from that in the last two years.'

Jess explained they became 'a bit overcome with data ... and you'd forget the child.' This narrative and some of those in the previous section illustrate a process of enactment change initiated through different elements of the external context of practice. They illustrate how, in some instances, changes to policy at the national level, after the FP was introduced, led to a focus on data, a narrower curriculum and reduced pedagogical engagement. The data therefore highlights an important issue, of how achievement in the FP should be assessed. It also appears to explain the high percentage of survey participants positioning the tests and some the LNF as negatively impacting enactment.

Key Stage 2

However, as alluded to in section 6.4, the data also suggests that a lack of alignment with the pre-existing KS2 curriculum that follows the FP also affected enactment in some cases. Tensions between the more formal, traditional KS2 curriculum and the FP were evident in teacher descriptions of children's difficulty transitioning between the two phases, illustrated below:

'Transition can be quite difficult, erm when you know they're going into a year 3 class and the year 3 teacher is expecting these children to be able to sit at a desk, pick up a pen and write reams and reams of information. Well, coming from FP that's not how they've been taught, that's not what they do.' (Ffion, Llanover Fawr)

'You get them coming up at year 3 who are, they're just not ready to access the KS2 curriculum which is different.' (Andy, Maes Bach).

Indeed, this tension is implicit in Tony's (headteacher, Maes Bach) description of the 'very big hurdle to jump to go from traditional KS2 methodology down to FP' for his staff when they transition to teaching in the FP from KS2. The following extracts illustrate how this impacts practice:

'That transition from 2 to 3 is a huge one and a lot of the reason children struggle so much is because the expectations change so vastly, erm you know they are expected to sit at their tables more and they're expected to work for longer periods and things like that. So those expectations change so much that I think in Year 2 particularly towards the summer we're gonna start preparing for that to happen, so that when they get to year 3 they hit the ground running' (Debbie, Dalestowe)

'I tend to do the more formal, you know just getting them ready, like my job, especially for the year twos, I'm preparing them for the next stage, so I do do a bit more written you know, get your books out, let's do this together, you know it's obviously focused.' (Ffion, Llanover Fawr) These descriptions relate to preparing children for *'the next stage'* and therefore, bridging the gap between the philosophical and pedagogical approach of the FP and KS2. They also help explain the tensions implied by the survey results and are implicit in Debbie's repeated framing of herself 'as a Key Stage 2 teacher' and at one point, 'an upper Key Stage 2 teacher,' and positioning of her concerns about the skills that had been 'lost' in the FP as shared by KS2 colleagues. Her discourse implied this justified a different interpretation of the FP and its purpose, which at least showed a level of awareness about her take on it. Her modifications to the more closely aligned enactment of FP that came before appeared to reflect the different values, pedagogical beliefs, and basic skills associated with the KS2 curriculum. This lack of alignment between these two first phases of children's education is echoed in other narratives. Lowri from Heathbrook for instance described *'looking at the data, year on year'* and observing a skill shortfall which led to the adoption of the literacy programme that Jess had earlier described fighting for because it was *'not very Foundation Phasey at all.'* This perspective related to perceived gaps in particular outcomes or rather, in attainment observed in KS2, as Lowri explains:

'We were saying there was a big gap and we needed to plug it in the Foundation Phase because we were getting a lot of children arriving in year 3 in Key Stage 2 who were still not reading fluently.'

These narratives illustrate how conflicts between the aims and philosophies of these two curricula may have contributed to different enactments of the FP and, potentially explain why the majority of survey participants indicated that the FP had had a negative impact on transitions to KS2.

While these data provide powerful illustrations of how tensions between policies at the macro, meso, and micro-level can impact enactment, the research identified other significant dynamics that appear especially relevant to schools serving disadvantaged communities and their ability to enact the FP as intended. This will be considered next, through a focus on the situated and material context of FP in these schools.

6.6 The situated and material context of practice in disadvantaged schools

As noted in Chapter Two, the FP is a resource-intensive curriculum predicated on higher adult-to-child ratios than its predecessor; it should offer well-equipped learning environments that are 'fun, exciting [and] stimulating' inside and out with a 'greater emphasis on using the outdoor environment as a resource for children's learning' (Welsh Government, 2015b, p.3). Indeed, Chapter Five illustrated how practitioners felt resources were crucial to enacting the FP effectively and that reductions may compromise enactment. However, while these are structural features of the policy that impact practice in all schools, the data suggest they are particularly significant in schools serving disadvantaged communities. This section presents data related to the situated and material context of practice (Braun et al., 2011) in schools in disadvantaged areas and demonstrates their particular significance to enacting a programme like the FP.

The diverse and complex needs of learners

To begin with, the situated needs of learners in these schools are typically greater and more diverse, characterised by higher rates of special educational²⁹, socio-emotional, and behavioural needs than typically found in more affluent schools. Indeed, in the schools serving highly deprived areas in this research, 'well-being needs, behaviour needs, speech and language needs' are framed as placing significant demands on staff time attention but not accounted for by the national recommended adult-to-child ratios and funding for FP. While one might argue that a school's situated and material context present challenges for practitioners regardless of whether a curriculum is progressive or traditional, the previous chapter highlighted how the sophisticated nature of the FP requires adults to adopt additional roles that are unique to its enactment (hence, the rationale for the higher ratios). Furthermore, pupils are expected to access the curriculum in multiple ways within a well-resourced environment, again differing from a more traditional curriculum. While this adds to the distinctiveness of the policy, the data suggests that in areas of high deprivation

²⁹ An eFSM learner in Wales is twice as likely to have a special educational need (Welsh Government, 2015a)

practitioner ability to enact these elements can be impaired by the situated needs of learners. Two headteachers for example, explain how the needs associated with material disadvantage, create additional pressures on practitioner time:

'We currently have 100 hours of statemented pupils within this school and are funded for 55, so I have to find 45 hours statemented pupil time, but all those things impact on the Foundation Phase.' (George, Cartref)

'In my Year 2 class, I've got I think it's 69% Free School Meals, so whatever we do in that class is based around meeting the needs of those pupils within that cohort... so in that class, a large amount of the time is linked to deprivation and where they're coming from.' (George, Cartref)

'We need to invest in so much support for children who've got those [social, emotional and well-being] issues, that we can often find less time unfortunately to work with the children who need bona fide educational support, because you're worrying about the others and their well-being.' (Tony, Maes Bach)

The 'vast range' in pupil ability in these schools was also framed as creating additional 'pulls' on time, and the lengthy process of diagnosing SEN and awarding support as impacting capacity in the classroom. Jess explains, it can take,

'months upon years to get any sort of diagnosis or support and so you could have a teacher and a TA in a reception class with 30 kids and three children waiting for an ASD diagnosis, so your one TA is acting as a one to three for those children and suddenly you're on your own trying to provide all these areas with rich enhanced learning, well actually if you're not there enhancing that learning, that learning is not going on.'

This clearly has a major impact on capacity to support all the desirable pedagogical practices within the classroom. In addition, some teachers described using interventions to equip pupils with a basic proficiency in some of the skills they feel are required to engage in the play-based, collaborative style of FP learning. Such skills are less relevant to a more traditional curriculum but increase pressure on time and adult support in the FP as it is diverted to supporting these purposes. Debbie for example describes how her TA runs interventions, 'not focusing just on maths and literacy', but rather, 'concentrates on those experiences through play and turn taking and things like that and sharing'. Teachers link shortfalls in these skills to material deprivation and its impact on cultural dispositions, a theme returned to later in the chapter.

Much discourse related to trying to balance the additional situated needs against the pedagogical demands of the policy and to the impact of this on time, focus and pedagogy. This is illustrated in the following examples:

'You need an extra two adults here because you take out...you have a couple of children coming in with behavioural needs, or additional issues; woof, one adult seems to be gone straight away you know, so it's still difficult to balance it all with the children that we have.' (Carys, Maes Bach)

'I don't have enough time then to fit in maybe some more of the high quality pedagogy that I want to.....because of the area that we work in we have lots of different needs for children. It maybe well-being needs, behaviour needs, speech and language needs, that there's lots of interventions and additional things we need to provide ... it's between you and your TA to deliver all these interventions,...it's like you're kind of battling with yourself of what's the right thing to do.' (Jen, Cartref)

These extracts demonstrate how some of the behavioural, socio-emotional and learning needs may play out in the FP, and manifest in what appear to be tensions between dealing with the immediate social, well-being, behavioural or SEN needs of some pupils, supporting the learning of all pupils, and embracing the various roles and pedagogies embedded in the curriculum. Furthermore, the following extract illustrates how the behavioural and socioemotional needs of some learners may not only hamper the enactment of this sophisticated curriculum but also become exacerbated by its child-led, play-based nature, where the intention is that pupils work collaboratively and learn through play: 'Independently, left on their own, it becomes a massive free for all for lack of a better word, because they're fighting over each other for things, they can't work together, they don't want to work together, their emotions, they can't regulate their emotion around it either, you know they can be perfectly happy one minute and then extremely angry the next because somebody has picked up the red lego brick that they wanted.' (Debbie, Dalestowe)

Implicit within this data is the suggestion that the curriculum itself may magnify the challenges these needs pose while intensifying the needs themselves. This is more likely to be a problem in schools in disadvantaged areas characterised by higher complex needs.

Impacts on pedagogy and focus

The way these situated and material needs manifest themselves is unique to the ability to enact this curriculum in that adult availability is crucial to fulfilling many of its pedagogical demands. These include participation in play indoors *and* outside, conducting small, focusedgroup activities and observations, and providing appropriate challenge and support during child-initiated and directed activity. The data suggests that the impact of the situated pressures on staff time and classroom management can lead to conflicts in terms of direction of focus or how to best support learning. This is captured in the following extracts:

'It's releasing that one member of staff to take a group outside where you perhaps think oh no, I really need my TA in the class, especially if you've got some behavioural difficulties, where you think if I haven't got that additional member then, I'm drawn away from what I am doing with a group, so it's trying to find that balance.' (Sarah, Cartref)

'The children need that questioning, they need that prompting, they need that inspiration and actually, if you haven't got people to be assessing them or watching or observing, how do you build on your planning you know? One person can't be everywhere, you need to have staff to make sure the learning is appropriate and supported in the right way... If you've only got two members of staff, you have to have some sort of formality going on otherwise you are simply crowd controlling. If not, there's no quality going on anywhere.' (Jess, Heathbrook)

'So you're left to try, on your own and, you can't, you can't man it, you can't let people outside on their own, then do you organise it so that everybody has an outside day, or so you know all in one go?' (Lowri, Heathbrook, when TAs are taken out of the classroom)

These data suggest teachers feel their ability to engage with all elements of FP pedagogy is compromised by the challenges presented by their learners and the limited material resources at their disposal, particularly in terms of staffing. They certainly seem to explain why 'the particular needs of children in this school' and 'behaviour' were positioned by some survey respondents as a particular obstacle to enactment in the previous chapter. Their accounts suggests that despite a desire to support the many pedagogical features of the curriculum, including outdoor learning, difficult choices and sacrifices must be made. Indeed, where capacity is compromised, the data suggest that adult-led focused activity may be prioritised over supporting learning in the continuous and enhanced provision, while the extracts above suggest that learning may be less likely to occur outside. This represents a significant departure from a particularly important area of pedagogical practice. The policy states for example that '[p]ractitioner involvement in children's play is of vital importance' (DCELLS, 2008b, p.6) and that there is a 'strong emphasis on outdoor learning' and '[t]he outdoor learning environment should be an extension of the indoor learning environment' (DCELLS, 2008d, p.41).

Nick from Heathbrook explains, 'you end up putting all your time in focused tasks because focused tasks don't work without an adult.' He describes unsupervised continuous and enhanced provision as resulting in children 'going off task' and 'poor behaviour,' and that it doesn't 'function to optimal'. This echoes a wider acknowledgment among teachers that when learning is unsupported in these areas, it is less likely to be effective. Debbie admits, 'we don't feel maybe that those skills are being taught quite as well as they could be should there be an adult present to be able to do that.' Similarly, Jess from Heathbrook explains that in such circumstances, children don't get '*what they were meant to get out of it*' commenting:

'If they're really valuing Foundation Phase and really valuing getting equal opportunity at the start, then you've got to back that up with people and money to resource it, because that's the biggest barrier and the weakness.'

The suggestion then is that in schools serving areas of disadvantage, the pressures emanating from the situated, diverse needs of learners reduce the capacity to supervise and extend the learning in the continuous and enhanced provision or learning outside. Practitioners believe that the corollary of this is a negative impact on the quality of learning in these areas, as children are left to their own devices not necessarily engaging with the curriculum as intended or in a meaningful way. These issues are clearly relevant to the pedagogical aims of this curriculum, less so for a more traditional one, and have serious implications for equity and social justice in the FP.

The effects of material deprivation on resources and experiences in the Foundation Phase

Classic accounts of material disadvantage in relation to education have tended to focus on factors like books, study space and IT. However, teachers suggest there are a wide range of material resources relevant to the FP that impact learning. Their discourse suggested pupils often lacked experience and knowledge of how to use the key resources common to the continuous and enhanced provision (such as sand, play dough, books, scissors, and craft materials). Anna at Maycroft explains, 'they just haven't had the resources,' while Jess at Heathbrook frames them 'at even more of a disadvantage, because they haven't experienced these things before.' She explains,

'The difference between the children is just massive. You will have children in our schools who have had all those things and are ready to learn.'

But material deprivation impacts the availability of these resources at home. Many teachers maintain this can lead to '*inappropriate*' use and further frustration over reduced capacity to support the areas of provision as intended. Andy at Maes Bach explains, '*sometimes when they're just left free reign, they don't always know how to use it or access it or how to use it all most successfully really.*' Jess explains that '*it works beautifully*' for more able pupils who have accessed certain resources and experiences before, because they '*use what they have been taught discretely, more appropriately.*' She explains, '*whatever they play they do it with more of a purpose*' and, '*for other children who haven*'t gathered those tools yet, they can't use them'. These are important insights that suggest where capacity issues lead to a lack of support for continuous or enhanced provision, pupils who lack experience of key resources may benefit less than their experienced peers.

Relatedly, as implied earlier, some children were seen to lack key play skills, fundamental to enacting a 'play-based' curriculum. Some teachers felt these had to be '*taught*' first, before play-based learning could be effectively accessed. Teachers described discretely '*teaching*' skills they felt were required to access the continuous and enhanced provision, to use resources appropriately, work collaboratively, independently, and learn through play. These are all key pedagogical features of the policy. The emphasis on 'teaching' below illustrates this:

'With the area of deprivation, these kids aren't having a huge amount of toys at home, they're not having structured play, they're not having a range of toys to play with, so we spend a lot of time *teaching* how to play, how to turn take, how to share, how to use these things appropriately and the real struggle for us has been the lack of funding for adults.' (Jess, Heathbrook)

'They need to learn the skill of working independently and learn that skill of using play in a way that enhances learning, but they need to be *taught* that.' (Debbie, Dalestowe)

'If they haven't got the vocabulary to speak about, and I know that's the point of the Foundation Phase, to have the chance to speak informally and to get the confidence and things, but actually, so much of that has to be modelled to our children, so that is
more *formal*. How to model it is more formal, there's no getting around it. They're not going to magically start doing it to each other unless they're hearing it from us first.' (Jess, Heathbrook)

'It is just having children who have come in with the skills, because otherwise you've got to *teach* those skills, you know so then it has to be a little bit more *prescriptive* to start off with and then towards the end of the year you can ease off, once they've learnt key things.' (Lowri, Heathbrook)

As time is limited by the need to achieve certain learning objectives and ensure play is 'purposeful', it is easy to understand the more formal pedagogical focus described above. The implication is that the pedagogical breadth and curriculum focus in schools serving particularly disadvantaged communities may differ from those in more affluent ones, where children are more likely to arrive with the skills, experiences, and dispositional advantages that appear important to learning in the FP. Yet these kinds of experiences appear to be the kind that Margaret McMillan was referring to back in 1904 in her description of the difference in capital between social groups that progressive education addressed (see Chapter Two).

However, for the FP it seems that differences in economic, social, and cultural capital may impact the curriculum that children are exposed to or their ability to engage with it. Yet learning through experience is framed as 'fundamental' to the FP in the policy documentation (Welsh Government, 2016a, p.2). Jess explains, '*it takes a long time to get them ready for FP and then when they are, it's the end.*' What seems to be particularly noteworthy here, is the implication that not only do you have to prepare a learner for the FP, but it assumes that children will have access to material and cultural resources associated with more affluent homes before school. It is perhaps no wonder that it is precisely the development of these skills and dispositions, and provision of experiences that teachers have framed as particularly valuable outcomes of the policy for these learners.

But there is another material issue particular to this curriculum. Four of the eleven pedagogical principles relate to the physical learning environment, which requires resourcing

with play and learning equipment. While the same formula is used to calculate FP budgets for all schools, research suggests that those in disadvantaged areas are less likely to be able to benefit from extra donations and contributions from parents or the economic, social, and cultural capital of their Parent Teacher Association's (Body, 2017, 2023; Body et al., 2017; Francis, 2015; Murray, 2019; Murray et al., 2019). Jess explains, *'unfortunately, we're not a school that has those funds to play with,*' and many of the teachers interviewed referred to supplementing resources themselves. Similarly, a school's ability to deliver the necessary enrichment trips, activities, and experiences for this experience-rich curriculum is likely to be impacted by the ability of children's parents to contribute to associated costs. This is particularly significant, as according to practitioners, it is these pupils who most benefit from such enrichment activities and experiences, as access to them outside of school is limited for these pupils.

Similarly, most practitioners pinned support at home as particularly important to the FP curriculum. Ellen for example feels, 'it has to be reinforced at home I do think or they're not really gonna get it.' She maintains:

'I try and involve the parents, cos that's what we do a lot, we try and involve our parents, because then when you get that involvement, we see a difference in the children.' And,

'It's getting those parents on board, then your Foundation Phase is going to work a lot better.'

Her account illustrates the importance of home support for learning and suggests that parental engagement was a deliberate strategy to mitigate the effects of disadvantage in the FP. However, many teachers highlight the difficulties of engaging families, recognising that they are time poor or simply don't have the resources. This is not surprising since children from lone-parent households are over-represented in disadvantaged schools (McCoy et al., 2014), and families are less likely to have flexible working patterns and economic security, and more likely to have greater health and housing stresses (Lupton & Hayes, 2021). These stresses compromise the ability of parents to engage and support learning in the FP both at home and at school, yet family engagement is a key pedagogical feature of the policy. The data presented in this section sheds much light on the survey results which suggested that funding and resources, the school building and facilities, behaviour, and the particular needs of learners were obstacles to enactment. It has shown how the interaction between material and situated factors can work against this curriculum. Moreover, the increased proportion of survey respondents identifying funding, resources and achieving the recommended ratios as the single biggest obstacle to enactment now appears very significant. This is because the data shows how the effects of this are likely to be more keenly felt in schools serving areas of poverty. Their situated context has been shown to create distinctive problems, particularly in terms of FP classroom management which the data suggest is particularly labour and therefore resource intensive. This is further exacerbated by reductions in resources. Combined with the impact of reduced economic, social, and cultural capital of their families, the data illustrates how inadequate resourcing and limited staff to pupil ratios in these schools may seriously compromise the ability of practitioners and pupils to fully engage with the programme's pedagogical approach. This type of curriculum therefore raises unique challenges for schools in disadvantaged areas, where disparities in social, material, and cultural capital have a bearing on engagement with the intended approach. Indeed, Braun et al.'s assertion that 'policy-makers tend to assume 'best possible' environments for 'implementation: ideal buildings, students and teachers and even resources' (2011, p.595) seems particularly relevant here.

6.7. Chapter Summary

This chapter has examined practitioner views and accounts of the FP in seven case study schools using the results of interview data from 21 practitioners. It has explored teachers' understanding of outcomes, descriptions of pedagogical practice, and investigated the relationship between changes in practice and patterns of measured pupil attainment during the study period. The chapter also explored the impact of context on enactment and some of the dynamics especially relevant to schools serving disadvantaged communities in an attempt to understand some of the tensions and disparities suggested by the previous chapters.

The chapter suggested that the broad ambition and objectives of the FP described in the introductory chapters has resulted in differential enactment and recontextualisation of attainment in this phase of education. It has shown how some practitioners, influenced by their professional values, and pedagogical and philosophical beliefs, adopt a discourse which critiques 'attainment' in subjects like maths and literacy as the only outcomes of worth, which they believe is based on a reduced understanding of achievement in the FP. The chapter demonstrated how some teachers recontextualised attainment, arguing that the softer outcomes are more beneficial to children from disadvantaged backgrounds. It showed how their professional values led them to resist external pressures to conform to a narrower framing of attainment. What was valued at the professional level here, related to the experiential pedagogical approach and improvements in broader, non-academic outcomes such as attitudes to learning and social development rather than what is traditionally measured as 'attainment'. Indeed, the chapter suggested that teacher perceptions of reducing poverty-based gaps largely relate to narrowing disparities in these domains rather than traditional attainment. This seems to go some way towards explaining survey respondents' enthusiasm about the programme for these learners in the face of limited observed progress towards narrowing gaps in measured attainment and perceptions of this highlighted in the previous chapters.

However, the chapter demonstrated that where enactment departed from the pedagogical design of the curriculum, sometimes this was due to practitioners' own professional values, and at others, a result of external monitoring, material considerations, or a combination of these. The chapter revealed a degree of dissonance surrounding the purposes and outcomes of the FP, and how it is assessed. It illustrated how tensions derived from different values and beliefs at the professional level may result in disparities in the curriculum's enactment. The chapter also showed how the outcomes and purposes of the FP may be contested at what Priestley et al., (2021) call different levels of curriculum making too, and how this may have a powerful influence on enactment in some classrooms. Indeed, the influence of tensions related to policy conflict at the meso- and macro-level within the external context, is a conspicuous theme throughout the data and appears to play a significant role in what appear to be differentiated policy enactments. The research has shown how different interpretations

by influential stakeholders (such as those of senior leaders at the micro-level and representatives of the meso-level) can facilitate or impede enactment aligned with the programme's pedagogical and philosophical intent, speaking to the conflicts in educational policy highlighted by the survey data in Chapter Five. It illustrated how the programme's recontextualisation was sometimes reframed by external pressures, even though other teachers managed to resist such pressures.

However, the findings also suggested that the intersection of situated and material dimensions of practice particular to schools serving deprived neighbourhoods are particularly relevant to the FP curriculum and these may significantly impact enactment. The chapter has shown that in such schools, teachers face tensions between the pedagogical demands of the policy, the material and cultural pre-conditions for implementation, and the multiple social, emotional, behavioural, and educational needs of cohorts typical to their catchments. This may lead to practice that is less aligned with the curriculum's design. The data suggest the tensions these create in terms of classroom management and pressures on practitioner time, may impact both pedagogical breadth and focus, and the quality of learning during self-directed activity. Indeed, it was suggested that there may be clear advantages for some more privileged pupils who arrive with certain knowledge and skills relevant to FP pedagogy, afforded by experiences that other children miss out on owing to material deprivation.

Whilst acknowledging the debates surrounding attainment and achievement in the FP, the chapter explored the relationship between enactment and patterns of attainment for pupils from disadvantaged backgrounds given the national objective of narrowing attainment gaps. However, the joint consideration of practitioners' discourse and changes in school attainment data suggested two trends. The first was that the adoption of more formal pedagogies or a narrower curriculum focus may have led to improvements in measured attainment in traditional subjects for disadvantaged learners. This appeared to be the case in three schools where a departure from the philosophies and pedagogies or broader curriculum focus of the FP was explained in terms of a drive to raise 'standards.' In the remaining schools, no relationship was found between changes to the curriculum approach and patterns of measured attainment for children from disadvantaged backgrounds. This could be explained by nuanced differences in various dimensions of practice during the study

period that go unnoticed in the data, or that teachers forget or find difficult to articulate. These might include differences in the allocation of funding, staffing, ratios, characteristics of different cohorts and the challenges these present over time.

Implicit within teachers' discourse was a lack of clear, cohesive pedagogical development or progression in the FP as a curriculum policy. However, the data presented in the chapter suggests this is unsurprising given the multiple ways in which the FP and its outcomes are understood, the dynamic contexts of practice, and the apparent reduction in funding for the programme. Indeed, the tensions depicted between the ways that outcomes of this curriculum are understood and measured, and the professional, external, situated and material context of practice, raise important questions about policy coherence, the purpose of the early-years curriculum, and the position of traditional attainment in this phase of education in Wales. Moreover, the data has suggested that the situated and material context of enacting this type of curriculum in schools in disadvantaged areas that are typically impacted by disparities in social, material, and cultural capital seems to raise unique challenges for these schools, raising questions over equity in provision and social justice. The findings and implications of this chapter and the preceding ones will now be explored in the next and final chapter of the thesis.

Chapter Seven: Discussion and Conclusion

7.1 Introduction

This research responds to the dearth of empirical literature on the impact of large-scale progressive early-years reforms on educational outcomes, particularly for learners from socio-economically disadvantaged backgrounds. It investigated an early-years, play-based curriculum in Wales - the Foundation Phase (FP) - as an example of a progressive reform. The first objective of the study was to examine the extent to which the FP impacted attainment in the early-years and mitigated the impact of poverty on pupil outcomes. The second objective was to investigate how it was enacted and perceived by practitioners, particularly in relation to children from disadvantaged backgrounds.

To address these objectives, the study adopted a three-phase sequential mixed-methods approach. The first phase of the research drew on statistical analyses of administrative attainment data for all Year 2 pupils over a six-year period. The second phase involved the analysis of a national survey of FP Lead Practitioners, in which almost a quarter of schools responsible for the FP participated. These results were then explored qualitatively in the third phase of the research. This involved the analysis of data derived from semi-structured interviews with 21 practitioners in seven case study schools, predominantly serving areas of socio-economic disadvantage. The study also drew on data and survey tools from an earlier evaluation of the FP by Taylor et al., (2015), which allowed comparisons over time to be made. This three-phased approach was deemed particularly helpful for addressing the rather complex research topic (see Chapter Three for methodological details).

This final chapter brings the main findings of these three research phases together to answer the central questions of the thesis. It discusses them in relation to the study's central aims, their significance, relation to the wider literature and implications for the FP going forward. The chapter expands upon some of the themes introduced in the empirical chapters and offers a deeper understanding of the impact of the FP, particularly for pupils from disadvantaged backgrounds. It will conclude that despite improvements in overall attainment and reduction of poverty-based gaps at lower levels, progress towards mitigating the impact of poverty on higher levels of attainment has been limited. However, it also highlights a

disconnect between this finding and the increasing proportion of practitioners that positioned learners from disadvantaged backgrounds as especially benefiting from the programme. Questions are raised about how teachers make sense of mixed policy messages, how achievement in the early-years is understood and measured, and how these can impact practice. Moreover, concerns are raised that under current funding arrangements, the findings suggest tensions unique to schools in disadvantaged areas may significantly limit teacher and pupil capacity to engage with the curriculum's progressive design.

The first section of the chapter summarises the research context, rationale, and research questions. Next, the contribution of the research is discussed, followed by a summary of the main empirical findings in relation to the central objectives and four research questions of the thesis. Then the significance and key implications of the study for policy and practice are considered with reference to the wider literature. This discussion focusses on what the thesis suggests are central constraints in the FP. The chapter then offers some suggestions for addressing the implications of the research and closes by highlighting the study's chief limitations.

7.2 Research Context, Rationale and Questions

The FP is the educational policy for all three to seven-year-olds in Wales. The central aim of the research was to study this programme's enactment and impact on pupil outcomes over time, with specific reference to pupils experiencing socio-economic disadvantage. As outlined in the introduction, the research had two specific objectives in this regard. The first was to examine the extent to which the FP has impacted attainment in the early-years (measured as assessed subject performance) and mitigated the impact of poverty. The second was to investigate how the FP was enacted and perceived by practitioners, particularly in relation to children from disadvantaged backgrounds. The topic of study was considered worthy of investigation for several reasons. Firstly, the introduction of the FP offered a unique opportunity to evaluate the impact of a progressive national education programme which markedly differed from both the curriculum it replaced, and approaches adopted elsewhere. This was because the reform itself was underpinned by progressivist philosophies, but the government also collected national attainment data for all six to seven-year-olds. The

opportunity was therefore unique because the availability of administrative attainment data meant that the impact of a progressive policy, not usually associated with national attainment data, could be measured. Furthermore, given the complex nature of curriculum reform and the time required for new policies to embed (see Durlak & Dupre, 2008; Fullan, 2000, 2008, 2016; Fullan & Pomfret, 1997), it was especially timely to examine the impact of this curriculum since it had been in place for almost ten years by the time the research began. There had also been little research on the impact of the FP since the early research by Siraj & Kingston (2014) and Taylor et al. (2015), making the case for re-examining the policy even stronger.

In addition, the ability to directly build upon the data and tools of a comprehensive early evaluation of the FP provided a unique opportunity to reflect on changes in pupil outcomes and practitioner perceptions and experiences of a new curriculum over time. This would help to establish whether the initial high regard for the policy (e.g., see Siraj-Blatchford et al., 2006; Taylor et al., 2015) had been sustained and if practitioners were more able to engage with the curriculum's design, or their opinion of the policy's impact had changed. This was considered critical to understanding the capacity of the FP to realise its aims as a lack of engagement with the FP as designed would inevitably impact this. Furthermore, early research on the FP suggested that, despite the warm reception among practitioners and beliefs that the FP particularly advantaged pupils from impoverished backgrounds, it would do little to close attainment gaps based on socio-economic disadvantage and may disproportionately favour pupils from more privileged backgrounds (Power et al., 2019). It was therefore considered crucial to find out whether this was the case, and if so, why?

As a system embracing a progressive curriculum whilst retaining some data and accountability metrics, there are inherent philosophical tensions concerning how outcomes or achievement might be understood and evaluated in Wales. For this reason, the research examined both teacher perceptions of outcomes and quantitative attainment data over a number of years. The research set out to answer the following four questions:

 How has pupil attainment in the Foundation Phase changed between 2011/12 and 2016/17?

- 2. To what extent has the Foundation Phase mitigated the impact of poverty on pupil outcomes during this period?
- 3. How is enactment of the Foundation Phase related to measured outcomes during this period?
- 4. How do teacher interpretations of the Foundation Phase relate to attainment, other educational outcomes, and perceptions of equity?
- 5. And how have they changed during the study period?

7.3 Contribution

This thesis contributes new knowledge to the small body of early-years research appraising the FP in Wales. It has built on the first comprehensive evaluation of the programme by Taylor et al., (2015) undertaken when the policy was in its infancy. In doing so, it contributes unique insights into the impact of the curriculum over time, including how the policy has been recontextualised by practitioners, and some of the practical challenges involved with such a sophisticated curriculum. The study offers a unique focus on the impact of the FP on pupils from disadvantaged backgrounds, which to date, is an underexplored area of research. It provides empirical evidence on poverty's influence on measured attainment over time while offering more qualitative insights into the relationship between the socio-economic contexts of schools, the FP curriculum, and some of the pedagogical compromises that practitioners may make, with clear implications for social justice.

The research also demonstrates how curriculum outcomes may be understood and contested, how this and tensions with wider policy directives may play out in the classroom and some of the difficulties of attempting to embed a progressive curriculum while retaining some metrics of data and accountability. It also contributes to wider discussions of the impact of early-years progressive curricula on children from disadvantaged backgrounds, where there is currently a shortage of empirical research.

Finally, the findings from this research expand our understanding of what material resources are in the early-years, and how disparities in resources at home may impact a child's ability to engage with a progressive approach like the FP. They have highlighted some of the assumptions that such a progressive approach is underpinned by, and how these may impact children from impoverished backgrounds from engaging with it as easily as their more affluent peers. While the findings are specific to the particular approach in Wales, they may also be of interest to curriculum policy makers and designers elsewhere, as they identify important issues to consider when implementing similar curricula for learners from disadvantaged backgrounds.

7.4 Empirical Findings

The discussion of the empirical findings in this section is structured by the two central objectives of the research. First of all, the findings related to the programme's impact on attainment and mitigating the impact of poverty on outcomes are discussed. Then the section moves on to discuss the findings regarding practitioners' perceptions and enactment of the FP, particularly in relation to children from disadvantaged backgrounds.

The programme's impact on attainment and mitigating the impact of poverty on outcomes

The first objective of the research and associated research questions involved examining the extent to which the programme had impacted attainment in the early-years and mitigated the impact of poverty on pupil outcomes. This was addressed in Phase One which involved the collection and analysis of Year 2 administrative attainment data for the three core curriculum areas³⁰ over a six-year period (all cohorts between 2011/12 to 2016/17). The data are based on teacher observational assessments of the child in the classroom and the analysis adhered to the specification of FP outcomes in the policy in terms of how children's development and progress is assessed and measured.

The results presented in Chapter Four demonstrated mixed findings. Nationally, there had been a significant rise in pupil attainment, including for pupils eligible for free school meals (FSM), but significant disparities between these pupils and their more privileged peers

³⁰ The three core areas that are examined by external agents are Mathematical Development, Language Literacy and Communication, and Personal and Social Development, Wellbeing and Cultural Diversity

remained. Disparities were particularly marked at the highest levels of attainment, Outcome 6+, and whilst there appeared to have been progress towards reducing relative attainment gaps (based on FSM eligibility), it was not enough to sufficiently narrow absolute gaps at higher levels, which seemed to have grown. In addition, the influence of poverty remained largely unchanged at higher levels when regression models were used to control for other pupil characteristics and school-level variables. Poverty's influence had, however, reduced for some outcomes at expected levels. Therefore, in answer to the research questions, there had been a general improvement in attainment over time and attainment gaps at expected levels, but the influence of poverty remained strong, particularly at higher levels where the attainment gap in absolute terms appeared to have grown.

As suggested in Chapter Four, how evidence like this should be used depends on the policy's objectives. If raising absolute attainment at expected levels is paramount, then the FP could be deemed a success. If raising the attainment of pupils from disadvantaged backgrounds is paramount, then it could equally be seen to have achieved its aims. However, if narrowing poverty-based attainment gaps is paramount, then the success of this curriculum has been limited. As the observed improvement in absolute attainment does not have a counterfactual (we do not know whether pupil attainment for those eligible for FSM would have improved anyway), the findings on relative attainment are particularly important. As such, because there was an explicit aim to mitigate poverty's impact on attainment, they give cause for concern. It appears therefore, that at least in terms of measured attainment at the end of Year 2, this aim has only been realised to a degree at expected levels, while at higher levels of attainment, the programme appears to have fallen short.

School-level analyses of pupil outcome data also revealed a significant amount of variation in outcomes and patterns of progress over time (both within and between schools). The different patterns of progress were difficult to interpret, and it seemed possible that teachers may have been enacting the FP differently. Since this would impact the programme's ability to realise its potential, it became a focus in the remainder of the investigation.

Perceptions and enactment of the Foundation Phase, particularly in relation to children from disadvantaged backgrounds

Given conflicting beliefs in relation to early-years pedagogy and the inconsistencies in understanding and enactment previously identified by Taylor et al. (2015), Phase Two and Three considered how the FP was perceived, interpreted, and enacted by practitioners, and how this had changed over time. These elements of the research sought to determine how interpretations related to attainment, other educational outcomes, and learners from disadvantaged backgrounds, and how closely enactment seemed to align with the pedagogical intention of the curriculum. While both phases contributed to the same (second) research objective and remaining research questions, the next section predominantly draws on the survey data to illustrate the findings of a much larger and potentially representative sample than the case study findings presented afterwards. Indeed, the more detailed case study findings are worth considering separately since they predominantly relate to schools in disadvantaged areas. Therefore, the section first considers changes in practitioners' opinion of the FP and its enactment, followed by how the FP is recontextualised in relation to attainment, other educational outcomes, and perceptions of equity. This latter discussion first considers tensions in the enactment of the FP and then the relationship between enactment and measured outcomes.

Changes in practitioner opinion of the Foundation Phase and its enactment over time

The results suggested that the initial widespread support for the FP during its infancy remained. However, despite a claimed familiarity with the pedagogical principles by the majority of practitioners, differences were noted in how easy teachers found engaging with them to be. Furthermore, the findings suggested that enactment, in terms of the level of reported engagement with the pedagogical design, varied. Longitudinal comparisons suggested a decline in the ability to meet the recommended adult-to-child ratios which were central to the FP's pedagogical design. This was likely to explain some of the difficulties identified engaging with the pedagogical elements.

The most widely reported obstacle to engaging with the pedagogical principles were the challenges posed by the material or resource needs of the programme. This appeared to be the case for the majority of practitioners. The results suggested that tensions between different policy directives described in the introductory chapters, particularly the national

tests, were sometimes experienced as obstacles too. However, what was interesting was that the needs of children in some schools, behaviour, and poverty were also positioned as obstacles to practice by a significant number of practitioners. Moreover, this view had become more widespread over time. As it was difficult to discern why the needs of children, behaviour or poverty would make it more difficult to enact this curriculum from the survey, this was addressed in the interviews that followed. The survey findings suggested that practitioners experienced the FP and engaged with its pedagogical design differently and that clarity remained a significant issue despite the additional guidance and resources provided by the time the survey for this research was undertaken.

Interestingly, the proportion of practitioners who felt the policy particularly benefited pupils from disadvantaged backgrounds had grown, with a sizeable majority recognising benefits for this group of learners. This finding appeared to be in tension with a) the limited progress towards reducing attainment gaps observed using administrative attainment data; and b) the notable decline in the proportion of teachers who believed the FP had a positive impact on attainment gaps. Indeed, with less than half of respondents sharing this view, it was unclear how practitioners felt the FP especially benefited these learners. Phase One and Two of the research therefore raised some important questions to explore in the more detailed case studies of Phase Three, the findings of which are summarised next. In particular, these concerned the disjuncture between practitioners' perceptions that disadvantaged learners were especially advantaged by the FP and the patterns observed in the administrative attainment data, and the nature of the differences and difficulties that respondents reported in the enactment of this curriculum, especially related to factors like 'behaviour' and the 'particular needs' of learners.

Recontextualisation of the Foundation Phase in relation to attainment, other educational outcomes, and perceptions of equity

Aligning with the general literature on curriculum enactment (e.g., Biesta et al., 2015; Braun et al., 2011; Clandinin & Connelly, 1992; Priestley et al., 2012; Wallace & Priestley 2011), the results suggested that professional values, philosophies, and pedagogical beliefs, played an important role in practitioners' interpretation and recontextualisation of the FP and its outcomes. Here, ideas about the purposes of education or the early-years and sometimes to the phase of education teachers received training in, were influential. Frequently, teachers' understanding of outcomes was broader than traditional attainment or that measured through teacher assessment at the end of Year 2. Traditional knowledge or proficiency in subjects like Maths and English, were barely mentioned when teachers discussed the positive outcomes of this curriculum. Instead, outcomes related to the fostering growth conception of education advocated in the new education movement discussed in Chapter Two. In the FP, this included softer, dispositional benefits such as attitudes to learning, independence, confidence, the development of social skills and pupil well-being. Furthermore, this broader conceptualisation of outcomes often related to the way in which the benefits and achievement for pupils from disadvantaged backgrounds and narrowing gaps between learners were framed. These learners were seen to benefit from certain pedagogical elements such as experiential learning, play, and small group work, and access to resources that they might not otherwise have access to. This was in addition to practitioners sensing a deeper understanding of and closer relationships with them. However, the data suggested how tensions derived from different values and beliefs at the professional level may result in disparities in how the curriculum was enacted.

Tensions in the enactment of the Foundation Phase

Philosophical tensions stemming from Wales' unique approach of adopting a progressive curriculum while retaining and reintroducing some national accountability mechanisms and metrics were manifest in the data. This meant that tensions existed in how achievement in the FP was understood and measured, which relates to some of the debates highlighted in Chapter Two. The valuing of different outcomes seemed to explain some of the divided opinion over the policy's impact on attainment gaps evident in the survey data. It also explained some of the disconnect between the positive view of the policy in relation to pupils from disadvantaged backgrounds and the observed limited impact on gaps in measured attainment. However, tensions were apparent at multiple levels of curricular activity, and between the FP and other educational phases and policy directives highlighted in the second chapter. Practitioners referred to tensions between the FP and national tests, inspection regimes and the accountability framework, indicative of policy conflicts not only in Wales, but within other national curricula too (e.g., see Priestley et al., 2012, Wyse et al., 2015).

These tensions and policy disconnections caused conflicts for some teachers in their enactment of the FP as they felt constrained by competing interpretations of outcomes derived from what were often framed as incongruent, standards and data driven policies or, historic cultures of practice, again, similar to those seen elsewhere (e.g., Priestley et al., 2012; Sinnema et al., 2020). Tensions were also noted between the FP and Key Stage 2 (KS2), the phase of education that immediately follows the FP. Some senior leaders and KS2 staff whose interpretations of outcomes and pedagogy was driven by the less aligned KS2 curriculum and associated training, had a significant influence on FP practice. These tensions seemed to explain some of the reported difficulties and obstacles to enacting the pedagogical approach observed in the survey, some of which may be addressed by the new curriculum presently rolling out in Wales which aims to more closely align education in the later phases with the FP.

The interview data also suggested that other tensions arise from the situated and material context of schools (Braun et al., 2011). The FP's materially demanding, experience rich, pedagogical design appears to make assumptions about the availability of staff and resources which the data suggests can be difficult to meet within any state system that has resource constraints and, particularly, in schools in disadvantaged areas. In such schools, practitioners appear to face significant challenges from the often-complex needs of their learners, including the greater socio-emotional, behavioural, and special educational needs typically found in them (e.g., see Lupton, 2004; Lupton et al., 2010; Thomson, 2015). These appear to present distinctive material challenges in terms of time and classroom management which are relevant to the FP's design and make it difficult to enact as intended. Furthermore, the data suggested this is exacerbated by the impact of material deprivation on certain childhood experiences and resources relevant to the play-based, experiential design. Here, poverty was seen to impact the development of certain skills and knowledge positioned as helpful for effectively or appropriately accessing the curriculum, particularly during self-directed activity and play.

The findings suggest that the pedagogical approach embedded in the FP assumes children have certain cultural dispositions, experiences, and skills that according to practitioners, those affected by socio-economic disadvantage often lack. Teachers described a consequent

need to devote classroom time to more formally teach these skills and the cultural codes necessary to enable children to successfully engage with the FP. Practitioners felt the combined challenges and limited staff-to-pupil ratios in these schools reduced their capacity to supervise and extend the learning in the continuous and enhanced provision where much self-directed activity occurs. This, they believed, impacted the quality of learning in these areas.

What's more, the data suggested that teachers in these schools felt less able to draw on the economic and cultural capital of their pupils' families to furnish the environment, contribute to enrichment trips and effectively support the programme's resource-heavy and experience-rich design. This is consistent with other research that suggests schools in disadvantaged areas are less likely to benefit from extra donations and contributions from parents or the economic, social, and cultural capital of their Parent Teacher Association's (e.g., see Body, 2017, 2023; Body et al., 2017; Francis, 2015; Murray, 2019; Murray et al., 2019). The combination of challenges described were thus presented as compromising both practitioner and pupil engagement with the curriculum's intended pedagogical approach and some powerful illustrations of self-aware pedagogical compromise were given.

So, while the data suggested that most teachers had a firmer understanding of the key pedagogical concepts and philosophies compared to the findings of earlier research (e.g., Siraj-Blatchford et al., 2006; Taylor et al., 2015), some identified difficulties engaging with them when faced with certain situated and material challenges, resulting in differential enactment. It seems, therefore, that the situated and material context of practice explained some of the difficulty practitioners reported engaging with FP pedagogies in the survey. These challenges thus appear to be particular to this type of curriculum and may be less relevant to a more traditional one. They also have significant implications for equity and social justice and, the ability of the policy to realise its aims, which will be discussed in section 7.5.

Relationship between enactment and measured outcomes

Finally, while the debates around the interpretation of outcomes are acknowledged (see Chapter Two), the study examined whether professional recontextualisation of the FP through different pedagogic practice might help explain Year 2 attainment based on administrative data. This was important because of the explicit aim of the programme to narrow attainment gaps between learners. However, the results suggested that in schools where significant changes to practice were described *and* improvements in the attainment of pupils eligible for FSM were observed, practice had become more formal, data driven and attainment focused and less aligned with the pedagogies and philosophies of the FP. Improvements in measured attainment outcomes did not therefore appear to be associated with greater policy alignment (i.e., more-deeply embedded, pedagogically, and philosophically-aligned practice).

For example, in one school, practice appeared to have become more formal as a result of meso pressure to raise attainment based on teacher assessed outcomes in the core curriculum areas at the end of Year 2. In this case, the former practice that was philosophically and pedagogically aligned with the FP curriculum (observed by Taylor et al., in their earlier evaluation), was not seen to deliver the *standards* of *attainment* that the educational inspectorate expected of the school. In the second case, senior leaders within the school felt that the less-formal practices were not delivering the literacy *attainment* outcomes that they desired and, as a result of these professional values, similarly resorted to more formal methods. These were interesting findings that speak to underlying tensions between Welsh educational policies highlighted in the introductory chapters. In the other schools, the FP was described as being 'tweaked' according to individual cohorts or changing adult-to-child ratios, but no clear sense of significant pedagogical progression was detected.

Therefore, the thesis concludes that while the FP may have been limited in terms of mitigating the impact of poverty on measured Year 2 attainment, different interpretations of outcomes at a professional and external level, particularly in terms of what are considered the most valuable outcomes, may have influenced how the programme has been enacted. Potentially, this may have impacted the type of outcomes focused upon and achieved by pupils by the end of Year 2. While the programme may have fallen short in terms of making good progress towards narrowing attainment gaps between learners at higher levels, practitioners often perceived other unmeasured benefits for pupils from disadvantaged backgrounds, including softer dispositional outcomes such as attitudes to learning,

independence, and the development of social skills and wellbeing. Furthermore, some saw progress towards narrowing gaps between learners in these broader terms rather than measured attainment. However, the data showed that a school's situated, and material context may constrain the alignment of FP practice with its intended pedagogical approach. Subsequently, the thesis suggests that this type of approach presents unique challenges for schools in disadvantaged areas, where disparities in social, material, and cultural capital may impact the way it is enacted.

7.5 Significance and implications for policy and practice

This section reflects on the significance and implications of these findings in relation to the future of the FP and its potential to realise some of its aims. The discussion centres on what the analyses suggest are two central constraints relating to aspects of the curriculum's design and enactment which potentially impact its ability to realise its aims. They concern the programme's material needs, in relation to the challenging contexts of schools in disadvantaged areas, and the tensions between its broad ambition, underpinning philosophical and pedagogical approach, and wider policy imperatives. This section considers each constraint with reference to the wider research literature. Although discussed separately, these constraints are not viewed as operating in isolation. Instead, the research suggests they may intersect and combine in ways to produce even greater disparities in practice, pupil experiences in the classroom, and therefore further impact the potential of the FP to realise its aims.

The situated and material context of schools in disadvantaged areas

Firstly, the findings suggest that consistent with wider descriptions of child-centred curricula (e.g., Bernstein, 1977; Power et al, 2019), the FP has greater resource needs than its more traditional predecessor. This appears to work at times as a constraint, largely because the data suggest that the ability to meet the material needs of the FP such as those relating to the learning environment and higher adult-to-child ratios, varies. As these are central to the FP's enactment, the implication here is that disparities may result in uneven pedagogical practice across Wales. Furthermore, in schools serving disadvantaged communities, the findings suggest that the challenges arising from material poverty and the concentration of

diverse social, emotional, behavioural, and special educational needs create additional demands on resources. These include pressures on staff time and classroom management, which may not be an issue in more affluent schools. The implication is that any difficulty in meeting the recommended ratios experienced by many, may be more keenly felt in these schools. This is concerning, since this research suggests such pressures may limit teacher capacity to enact the curriculum as intended or provide the types of learning experiences that might be offered in schools in more affluent areas. This has clear implications for equity in Wales.

Furthermore, wider research suggests that capacity issues like those depicted in this study may be more important to an innovation's success than the innovations themselves (e.g., Fullan & Pomfret, 1977). Research suggests for example that the less prescribed and more innovative or complex a curriculum reform is, the greater the challenge in terms of developing capacity among the workforce to implement it effectively (e.g., see Fullan and Pomfret, 1977; Lambert & O'Connor, 2018). Capacity issues are not unique to schools in Wales, since the complexities of practice in schools in disadvantaged areas are evidenced elsewhere (e.g., see Johnston and Hayes, 2007; Lingard & Mills, 2007; Lupton 2004; Lupton & Hempel-Jorgensen, 2012; Thrupp, 1999). However, they are especially relevant to the sophisticated design of the FP and the range of pedagogies that practitioners are meant to embrace. The use of a wide repertoire of pedagogic strategies for example was framed as central to the success of the FP (Maynard et al., 2010) but the findings suggest this can be particularly challenged in schools in disadvantaged areas.

Furthermore, Chapter Six demonstrated that such capacity pressures may manifest in the use of more formal pedagogies rather than the less formal ones associated with the pedagogical design. This is broadly consistent with research elsewhere that suggests the impacts of capacity pressures on pedagogy include a focus on basic skills rather than enrichment, and more teacher-centred, less active learning (e.g., see Lupton & Hempel-Jorgensen, 2012; McCoy et al., 2012; Thrupp, 1999). Other research has also demonstrated that ratios impact the kind of curriculum and pedagogy that can be adopted and that where ratios were less favourable, there was a 'greater tendency to use didactic approaches and control management' (Bertram and Pascal, 2002, p.40). Furthermore, some authors frame these

pressures as less conducive to the development of high quality, creative pedagogies, resulting in a tendency towards an inequitable distribution of pedagogical practice, loaded in favour of schools serving more advantaged pupils (Lupton & Hempel-Jorgensen, 2012).

However, while the challenges posed by offering a broader, enriching curriculum in areas of disadvantage have been noted elsewhere (e.g., Lupton & Hayes, 2021; Lupton & Hempel-Jorgensen, 2012), the findings of this research also raise questions about the curriculum's design in terms of the types of resources and experiences that it builds upon. For example, the tendency of child-centred curriculums to draw more strongly on social, cultural and economic capital than more traditional ones has been noted by others (e.g., Bernstein 1977; Muijs, 2009; Power et al, 2019), and the data in this study indicate this is especially the case with the FP. The findings suggest that what children and their families bring socially, culturally, and economically to the FP, is more important than it's likely to be to a more traditional curriculum. Yet parental capacity to provide the types of experiences, play and learning resources, to contribute to classroom environments and pay for enrichment activities or organised trips relevant to the FP is not even, but rather, is restricted by material capital.

Some teachers fear that a lack of access to such experiences and resources may compromise the quality of learning during self-directed activity and play. Furthermore, the research suggests this concern is stronger where adult support for this type of learning is minimal, which is more likely to be the case in schools in disadvantaged areas owing to material and capacity issues described earlier. If this fear is realised, there are again serious implications for equity in terms of learning development across Wales. Furthermore, as some teachers described a need to use more formal pedagogies to compensate for the shortfalls associated with material deprivation, either to teach certain skills or model the use of resources typically found in the learning environment that children from disadvantaged backgrounds are unfamiliar with, this suggests a different form of pedagogical exposure or learning experience is more likely in areas of deprivation, at least initially. This aligns with other research evidence that schools with more advantaged intakes offer more ambitious and enriching activities, less accessible to poorer pupils (e.g., see Power et al., 2009; Power et al., 2020; Taylor et al., 2009).

The findings of this study lend support to Lupton and Hempel-Jorgensen's (2012) suggestion that overcoming such contextual barriers to the development of new pedagogies may contribute as much to a more socially-just system as the pedagogies themselves. The particular concern for the FP is that while disparities in capacity and access to resources relevant to teacher and pupil engagement with its pedagogical design go unnoticed, they may significantly impact what children can access in the FP, the type of pedagogical experience they encounter and ultimately, their learning progression within it. This has significant implications in terms of equity in Wales given the policy's ambition to provide a child-led, pedagogically sophisticated curriculum for 'all pupils.' Moreover, if this curriculum is more dependent on a range of material resources within the classroom and certain material, social and cultural resources within the home, learners from disadvantaged backgrounds concentrated in schools challenged by their diverse needs, spending more of their budgets supporting health, welfare and special educational needs, and subsidising equipment, materials, and enrichment activities that more affluent families may provide (see Thomson, 2015), may become what others have called 'doubly disadvantaged' (Power et al, 2019).

With the resource-intensive pedagogical nature of the FP then, the implication is that disparities related to material disadvantage may not only mean that good progress towards narrowing gaps between learners may be lacking. Rather, there is a risk that socioeconomically-derived inequalities in broader outcomes are exacerbated too. Whether or not these potential disparities explain the limited or mixed progress towards narrowing gaps in measured attainment remains unclear. However, they are nevertheless likely to constrain the policy's ability to achieve its pedagogical ambition and its overarching aim related to equitable provision and outcomes in Wales. The research therefore raises fundamental questions about the efficacy of a progressive approach for the most disadvantaged children in society and concerns that under certain funding arrangements, tensions unique to schools in disadvantaged areas may significantly limit both teacher and pupil capacity to engage with a curriculum's progressive design.

Challenges of the policy's broad aims, underpinning approach, and wider policy imperatives

While the inevitability of interpretation, mediation and translation in curriculum making is widely acknowledged (e.g., see Priestley et al., 2021), the particular scope afforded in the FP may have limited the programme's ability to realise its aims. For instance, it is argued that the written curriculum should provide consistency in its intended direction by clarifying the most important goals, and that coherence and clarity are central to what is attainable in curriculum reform and developing classroom practices (Fullan, 2008; Fullan and Pomfret, 1977; Sullanmaa et al., 2019). However, there appear to be weaknesses in this regard with the FP as tension in the interpretation of outcomes was a conspicuous theme throughout the data. The findings also suggest this has been exacerbated by policy tensions which appear to have impacted the way the curriculum is enacted in some schools.

This is perhaps unsurprising, since Maynard et al.'s (2012) detailed analysis of the curriculum documentation suggested the FP was not a straightforward policy with clear aims and actions. Indeed, they suggested inherent tensions might make its interpretation and implementation difficult. The findings of the current research support their conclusion, as the policy's wide ambition, philosophies, broadly conceived objectives, and sophisticated pedagogical design, set within what has been depicted as a wider conflicting policy landscape, appears to offer considerable space for uncertainty and interpretation. The implications of course are that this may result in widespread disparities in practice and lack of alignment with the intended curriculum, which may again compromise the policy's ability to realise its aims.

The research suggests, for instance, that the latitude for practitioners to align provision with individually-held values may influence which outcomes of the FP are prioritised in practice. This highlights a tension between outcomes measured through attainment and outcomes as judged by teachers, which may be seen as a central tension within the policy. Furthermore, as teachers decide upon the best ways of meeting the challenges presented by the contextual dynamics of their practice, including the material resources, situated needs of learners and professional and cultural practices of the school, there is even greater potential for different enactments on the ground. This is especially likely given the significant

challenges faced by some practitioners in schools in disadvantaged areas. The findings imply that who the learners are, and the nature of their needs may influence what is valued and, potentially, the focus of the FP in some classrooms. This aligns with research by Lupton in disadvantaged schools in England, that found some teachers felt emotional and social development and development of listening and concentration skills were valuable lesson outcomes in themselves, even if short-term academic learning was limited (2004). If what teachers value in terms of outcomes influences their provision through what they prioritise in practice, the implication is that this will impact what is experienced and learned in the FP, with inevitable implications for equity.

The research suggests the situation is not helped by what appear to be conflicting messages within the wider education system, as tensions with policies associated with the Welsh accountability framework also appear to influence what is valued in the FP and direct practice. This has been shown to be the case even where it doesn't align with headteacher and classroom teacher interpretations of the programme. While Wales has not adopted a high-accountability system, it did retain and reintroduce some national accountability mechanisms, national tests, and concomitant overlapping meso-level bodies which are described in the introductory chapters. The research suggests this may have resulted in pressures to conform to practices that many believe conflict with the ethos, philosophy and underpinning aims of the FP and its constructivist and progressivist approaches to knowledge and pedagogy. While Wales has since removed some of the accountability mechanisms, this research speaks to the importance of policy coherence both within a curriculum, and between curriculum and wider national policies.

These findings are perhaps unsurprising. Wider research for example has warned that in systems driven by accountability and testing, where outcomes are officially valued but beyond measurement, outcomes may become less visible in curriculum enactments (Luke et al., 2013). At times, this seemed to be the case in the FP. The tensions caused by attempting to accommodate progressive ideals within standards and accountability driven systems have been noted elsewhere (eg., Alvunger et al., 2021, McPhail, 2016) and some early warnings were directed at the FP in this regard. Chicken (2019) for example cautioned that teachers may find it difficult to reconcile such agendas with the demands of the FP, pointing to

possible implications for pedagogical practice while early research suggested this might be the case (Taylor et al., 2015; Waldron et al., 2015). Even Maynard et al., (2012) questioned whether the principles of the FP could be maintained if a focus on raising standards dominated approaches to teaching and learning, and a later review by the OECD warned of a danger of reading and numeracy, as assessed, becoming the default curriculum rather than the broader learning goals of the Curriculum and Skills Framework (OECD, 2014). Noting a tension in Year 2, they questioned the introduction of Reading and Numeracy pencil and paper tests, asking if they ran counter to the FP's emphasis on broader outcomes. This was a view also expressed by many practitioners in this study. Although there has been some recent loosening of the accountability agenda in Wales, this thesis suggests these challenges remain.

Given that research elsewhere suggests a strong emphasis on raising standards may significantly impact pedagogy in disadvantaged schools and lead to the maintenance of pedagogical practices that are unlikely to be transformational, this may raise some concerns (e.g., Johnston and Hayes, 2007; Lupton & Hayes, 2021; Lupton & Hempel-Jorgensen, 2012; Thrupp, 1999). Therefore, how the FP has performed here depends on what the central aims of the policy are. If it is pedagogical transformation through the provision of a broad, play-based, child-centred curriculum for instance, then the findings suggest this might not be achievable nationally while tensions between policies and uncertainties about which outcomes are most important in addition to resource constraints remain. While this research suggested that a data driven, more formal approach associated with accountability may have improved measured Year 2 attainment in maths and literacy, this appeared to be at the expense of the type of philosophical and pedagogical practice that practitioners felt aligned with the programme's intent.

Early research highlighted ambiguities about the framing of traditional subjects like literacy and numeracy in relation to the FP (e.g., Lewis, 2016; Taylor et al., 2015). Yet the relative positions of various curriculum outcomes and pedagogies seem to remain unclear. Such continued ambiguities and tensions at the macro, meso and micro level might explain why so many teachers still felt clarity was an obstacle to enactment, despite the policy's ten-year status and provision of further guidance.

The findings appear to raise an important question about where exactly traditional attainment, represented by measured outcomes in subjects like literacy and numeracy, fits within the aims of the FP, especially in terms of the construction of the policy's pedagogical elements and relative to the softer, broader, dispositional outcomes valued by many. Was the FP for example designed to narrow attainment gaps in traditional subjects like literacy and numeracy by the end of Year 2? Or, at a later stage, indirectly, through the development of broader outcomes such as improved dispositions to learning? Indeed, some educational theorists argue that the development of softer skills and dispositions can positively impact later attainment and mediate the effects of socio-economic disadvantage (e.g., Carneiro et al., 2007; Heckman, 2006; Liu, 2019; and Schoon et al., 2021), yet traditionally progressive approaches value broader types of outcomes as worthy end points in themselves (Carr, 1988; Kohn, 2015). However, given concerns by some that a focus on dispositions may be at the expense of what pupils actually learn or empty of the knowledge content required for conceptual development (e.g. McPhail & Rata, 2016; Rata, 2012) and wider debates about equity and access to powerful knowledge (e.g. see Hoadley et al., 2019; Young & Muller, 2010; 2013), it is worth considering and more clearly articulating the aims and position of the FP is in this regard.

Ultimately, the research raises important questions about the implications of tensions between outcomes and assessment for pupils from disadvantaged backgrounds. Moreover, it raises fundamental questions about how attainment or achievement in the FP should be measured. These issues seem paramount to any appraisal of the programme's success. For if, as the data suggest, such tensions and incoherence lead to significant deviations from the programme's design, this is likely to frustrate its ability to realise its aims as imagined by its architects. As the research has suggested that tensions in the way that outcomes are understood and measured may impact which outcomes are prioritised across Wales, this could explain some of the observed differentiated progress towards narrowing gaps between learners nationwide when looking at measured attainment in Year 2. Taken together these findings have implications for the evenness of pedagogical practice and the types of pupil experiences offered and outcomes nurtured across Wales. Indeed, unless addressed, they may continue to operate as a constraint in the FP and limit its potential to realise its aims,

particularly in relation to equity. The next section offers some suggestions for how these issues might be addressed.

7.6 Suggestions for addressing the implications of the findings

The findings suggest pupils in Wales were offered differential learning experiences and outcomes in the FP. It is possible that as a result, the FP may have been prevented from realising its aim of mitigating the impact of poverty and 'closing the gap' to full effect. While the different ways in which practitioners perceive gaps between learners are acknowledged, this section offers four suggestions to address the identified constraints to the programme's enactment and therefore, implications of the research. The suggestions centre on some of the main challenges to enacting the curriculum as intended, particularly in schools in disadvantaged areas. They relate to developing and supporting practitioners' ability to overcome these challenges and centre on four areas that relate to clarity and alignment, research on the material impacts of poverty on learning, funding, and training.

Clarity and alignment

As the new Curriculum for Wales is rolled out, the findings suggest there is a need for greater clarity about the most important outcomes, how they should be measured, and how the different phases of a child's educational journey and wider policies align with this. The research therefore suggests that the central purposes of the FP (in terms of pedagogical experience and educational outcomes), and how these relate to reducing achievement gaps between learners based on socio-economic disadvantage, are debated, articulated, and clearly communicated. The new Curriculum for Wales at least appears to offer some hope in terms of greater alignment with later educational stages.

In addition, it is important to ensure that the assessment, evaluation criteria, and accountability processes in the FP are founded upon these aims and outcomes. Only then can we develop appropriate assessment tools to measure all the potentially important outcomes and benefits of the programme. Otherwise, we fall into the trap of valuing what is measured rather than measuring what is valued. Ensuring alignment between phases, purpose, pedagogy, and assessment will therefore require a resolution of the conflicts outlined in this

research between different policy imperatives, particularly in terms of deep-rooted historic cultures of standards and accountability.

Further Research

The second suggestion relates to developing a firmer knowledge base about the material and cultural impacts of poverty on the FP and the relationship between pedagogy and pupil outcomes.

The impacts of poverty on the Foundation Phase

It is proposed that a detailed examination is undertaken that considers firstly, those impacts related to the learner in terms of the underlying assumptions of the FP, such as children's prior access to resources and cultural experiences, and their parents' or carers' abilities to engage with school activities and embed their children's learning. It should also consider how practitioners respond to this in terms of pedagogical practice and curriculum focus. It is expected that this research would include a consideration of both the complex needs and experiences of learners concentrated in schools in disadvantaged areas and how shortfalls in material resources in these schools impact a practitioner's ability to enact the FP as it was intended.

By providing a detailed review of how the material effects of poverty can impact both a practitioner's ability to offer equitable curriculum experiences, in addition to a child's pedagogical engagement with and development in the FP, a knowledge base can be developed from which to re-evaluate the funding of the FP. This body of knowledge is considered key to ensuring that all children in Wales are offered equitable curriculum experiences and chances of success. It is therefore suggested that the research include an assessment of the additional resources that schools and practitioners require to overcome the barriers identified, addressing factors like classroom capacity in the FP. Indeed, such research would also respond to wider calls by authors such as Lupton and Hempel-Jorgensen (2012) to develop a broader and more critical understanding of the impacts of socio-economic disadvantage on student learning. This, combined with the next recommendations, is considered critical to ensuring the FP is appropriately resourced to enable *all* children in

Wales to benefit from equitable curriculum experiences and chances of success. The findings of the proposed research would therefore be expected to feed into policy and practice.

Relationship between pedagogy and pupil outcomes

Given that the pandemic prevented this study's planned classroom observations from taking place, it is recommended that future research incorporate such observational components to enable a closer examination of the relationship between how the programme is enacted in classrooms (i.e., the degree to which it is aligned with the intended philosophical and pedagogical approach of the written curriculum) and the achievement of pupil outcomes. Furthermore, it is a recommendation that the types of pupil outcomes investigated include both traditional attainment using readily available data and the broader outcomes that the programme aims to develop with regard to all learners. This will therefore need to follow a) the clarification of the intended outcomes of the FP recommended above, b) the investigation of the diverse ways in which we can conceptualise and measure them, and c) the subsequent creation of suitable, valid, and reliable measures of assessment that capture all intended outcomes of the programme.

Afterall, it is argued that the effectiveness of approaches must be 'stringently' researched in order to see how genuinely equitable outcomes can be achieved (Muijs, 2009, p.96). It is therefore hoped that by taking these research proposals on board, a greater understanding of the strengths and limits of the FP as a progressive early-years approach, particularly in relation to different groups of learners and equitable outcomes, might be afforded.

Funding

Although this study did not specifically investigate the funding of the FP, it would be remiss to ignore the issue going forward given the findings related to the curriculum's resource-intensive nature and challenges in schools in areas of socio-economic disadvantage. While the potential benefit of the Pupil Deprivation Grant (PDG) on pupil outcomes is acknowledged by this research and more widely (e.g., Pye et al., 2017), it is difficult to measure its success in terms of its impact on student outcomes. However, the findings of this thesis suggest whatever the effect of the PDG, it does not appear sufficient to overcome the significant challenges to pedagogical practice caused by the potential disparities in the

resources required to offer equitable curriculum experiences in the FP. An appeal is therefore made on social justice grounds for a review of the contextualised funding model specifically in relation to the FP.

This assessment should be based on the deeper understanding gained from the proposed research above, of the way in which additional resources may mitigate some of the impact of socio-economic disadvantage on school resources and capacity to enact key FP roles and pedagogies. Indeed, wider research supports tending to capacity issues when trying to implement curriculum reforms or improve the quality of education and enhance social justice (e.g., see Fullan and Pomfret, 1977; Lambert & O'Connor, 2018, Lupton, 2005) and this research suggests these are not currently adequately addressed. Funding should therefore be designed to help overcome some of the challenges presented by poverty identified in this thesis. The findings suggest that greater nuance in the distribution of funding might address the different circumstances in which practitioners operate and increase their capacity to offer equitable pedagogical experiences and opportunities for all. However, it is important to note that this review should also consider the wider research that highlights the limitations of using number of pupils eligible for free school meals or other indices of deprivation as the sole basis for contextualised funding, since other differences between schools in disadvantaged areas may also have resource implications (e.g., see Lupton, 2004; MCoy et al., 2014).

Training

Finally, it is proposed that both initial teacher training and continuing professional development are enhanced to incorporate the findings of the research proposed above and those of this thesis. The findings of this study for example suggest that training is geared towards equipping practitioners with the additional skills, knowledge and expertise required to work with pupils affected by disadvantage, based on a critical understanding of the material impacts of poverty on the ability to engage with the pedagogical approach and development in the FP. This should include an appreciation of the impacts of poverty on family resources and engagement and alternative strategies that may be required to support and engage learners and families affected by disadvantage. Combined with more sensitive funding, training for practitioners working in challenging contexts should ideally aim to

provide greater confidence, ability, and clarity over how to prioritise time to maximum effect. While the provision of specialist training courses and CPD for practitioners working in these schools is likely to be helpful, given the proportion of families affected by poverty in Wales it is suggested that initial teacher training (ITE) includes a focus on the key skills and knowledge practitioners require to work with children and families affected by poverty and manage the complex challenges within schools in areas of significant disadvantage. This recommendation echoes calls elsewhere to build a broader and more critical understanding of the impacts of poverty on learning into ITE and CPD (e.g., Lupton and Hempel-Jorgensen, 2012).

7.7 Research Limitations

The main limitations of the research relate to the lack of an observational component, limited causality, generalisability and focus of measurement on narrowly conceived outcomes. It is important to also acknowledge that improvements or otherwise in teacher-assessed pupil attainment over time cannot be singularly attributed to the longer-term implementation of the FP, since this trend might have been achieved had the FP not been introduced and there were no counterfactual cases available to study. Furthermore, the impact of other concurrent initiatives such as the introduction of the Literacy and Numeracy Framework, Pupil Deprivation Grant, national reading and numeracy tests, and changes to levels of funding are also unknown. However, the study's focus on relative attainment during the continued enactment of the FP was an advantage. This is because it partly addresses the missing counterfactual issue highlighted above by providing a focus on the attainment of pupils from disadvantaged backgrounds relative to their peers under the same programme.

The methodology chapter also described the impact of the pandemic on the intended method of the study which prevented case study observations from taking place. This meant that FP enactment was not observed through a more objective lens. However, practitioners appeared very frank about the challenges they faced and the compromises they made in trying to enact the curriculum as intended, and openly confessed to incongruencies between them. These narratives were invaluable for addressing the research questions.

In addition, it is acknowledged that the research results are unique to the specific context of the FP in Wales and cannot be widely generalised to progressive approaches elsewhere. Furthermore, the qualitative findings are drawn from just seven schools, predominantly serving areas of significant disadvantage, and there are inevitable limits to their generalisability across Wales. However, they do offer valuable qualitative explanations for some of the survey results which were derived from a much larger sample of schools and the analysis of routinely collected data for all primary schools in Wales. While the focus on schools in deprived areas was considered particularly useful for gaining a deeper understanding of some of the views, experiences and challenges practitioners faced working in such contexts, it would have been valuable to compare the results with those belonging to practitioners working in more privileged areas. However, the size of the sample required for this would have been beyond the scope of the research which opted for quality over quantity.

Some comparative insight might have been afforded had the schools' socio-economic contexts been identifiable in the FP Lead Practitioner survey. This would have enabled analyses to determine whether perceived benefits, challenges and reported pedagogical engagement varied with a school's socio-economic context. However, the decision was taken to collect as little identifiable data as possible to maximise anonymity in an attempt to boost response rates, although it is impossible to tell whether this compromise was worthwhile.

A further limitation relates to the way impact has been measured in this research, using attainment based on teacher assessed pupil outcomes in mathematical development and language, literacy, and communication at the end of Year 2. For some, this might appear to represent a narrow interpretation of outcomes. However, it was important to include a focus on the 'expected standards of children's performance' for these outcomes outlined by Welsh Government (2015b, p.2) for a number of reasons. Firstly, they relate to the aims of the FP, are a focus of the curriculum documentation and are regularly measured by practitioners when assessing pupil progress; secondly, because Year 2 data for these outcomes is routinely collected and reported by Welsh Government and used to evaluate gaps between learners; thirdly, because school inspectors make judgements about educational progress, school performance and gaps between learners using this information; fourthly, they were available

at a national level and allowed identification of different groups of learners for comparison and finally, because the evaluation by Taylor et al. (2015) and the conclusions drawn by Power et al (2019) also focused on these outcomes.

A more accurate picture of the programme's impact on traditional attainment and attainment gaps might have been gained from a comparison of performance in the national reading and numeracy test. This is because they provide standardised progress scores unlike the outcomes used that were based on teacher observations and end of year assessments. However, this data was not accessible. Finally, the limitations of using free school meals as a proxy measure of socio-economic disadvantage are acknowledged, a full justification for the use of this measure is provided in Chapter Three.

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Appendices

Appendix A: Ethical Approval Letters Appendix B: Welsh Government Data Request Appendix C: Impact of the COVID-19 pandemic Appendix D:National Foundation Phase Lead Practitioner Survey and invitation to participate Appendix E: Foundation Phase Pedagogical Principles Appendix F: Invitation letters and information papers for case study school headteachers Appendix G: Interview schedule Appendix H: Information papers and consent forms for interview participants Appendix I: Analytical coding with example extracts Appendix J: Regression results estimating the likelihood of achieving each outcome for cohorts 2011/12 to 2015/16 Appendix K: School variation in levels of attainment and attainment gaps illustrated through quartile distribution according to whether schools have low or average/high proportions of pupils eligible for FSM Appendix L: Relative change in school attainment gaps between T1 and T2 for LLC and PSD Appendix M: Quantitative information for relative change in school gaps using T1 and T2 gap quartiles Appendix N: Enactment (non-collapsed survey data) Appendix O: Correlations between perceptions of how easy practitioners feel it is to enact the pedagogical approach and the extent to which they are embedded within their schools

Appendix P: Impact of educational policies and directives (non-collapsed survey data)

Appendix Q: Cohort characteristics of case study schools
Ethical Approval Phase One:



School of Social Sciences Ysgol Gwyddorau Cymdeithasol Head of School, Pennaeth yr Ysgol Dr Tom Hall

10th August 2018

Our ref: SREC/2854

Nikki Jones SOCSI

Dear Nikki,

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Your project entitled '*Evaluation of the Foundation Phase*' has now been approved by the School of Social Sciences Research Ethics Committee of Cardiff University, and you can now commence the project should all necessary forms of approval have been received.

If you make any substantial changes with ethical implications to the project as it progresses you need to inform the SREC about the nature of these changes. Such changes could be: 1) changes in the type of participants recruited (e.g. inclusion of a group of potentially vulnerable participants), 2) changes to questionnaires, interview guides etc. (e.g. including new questions on sensitive issues), 3) changes to the way data are handled (e.g. sharing of non-anonymised data with other researchers).

In addition, if anything occurs in your project from which you think the SREC might usefully learn, then please do share this information with us.

All ongoing projects will be monitored and you will be obliged periodically to complete and return a SREC monitoring form.

Please inform the SREC when the project has ended.

Please use the SREC's project reference number above in any future correspondence.

Yours sincerely

Professor Alison Bullock Chair of School of Social Sciences Research Ethics Committee Cc Chris Taylor, Mark Connolly, SOCSI Postgrad





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School of Social Sciences Ysgol y Gwyddorau Cymdeithasol

21 February 2019

Our ref: SREC/3191

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All ongoing projects will be monitored and you will be obliged periodically to complete and return a SREC monitoring form.

Please inform the SREC when the project has ended.

Please use the SREC's project reference number above in any future correspondence.

Yours sincerely

Professor Emma Renold Chair of School of Social Sciences Research Ethics Committee Cc: Chris Taylor, Mark Connolly



THE QUEEN'S





SWAN

egistered Charity No. 1136855 Elusen Gotrestredig Rhif, 1136855

Ethical Approval Phase Three:



School of Social Sciences Ysgol y Gwyddorau Cymdeithasol **Cardiff University**

Glamorgan Building King Edwards VII Avenue, Cardiff CF10 3WT, Wales, UK Tel +44(0)29 2087 5179 Fax +44(0)29 2087 4175 www.cardiff.ac.uk/social-sciences

Prifysgol Caerdydd

Adeilad Morgannwg Rhodfa'r Brenin Edward VII, Caerdydd Ffon +44(0)29 2087 5179 Ffacs +44(0)29 2087 4175 www.cardiff.ac.uk/social-sciences

06 December 2019

Our ref: SREC/3425

Nikki Jones PhD Programme SOCSI

Dear Nikki,

Your project entitled 'Evaluation of the Foundation Phase' has now been approved by the School of Social Sciences Research Ethics Committee of Cardiff University and you can now commence the project should all necessary forms of approval been received.

If you make any substantial changes with ethical implications to the project as it progresses you need to inform the SREC about the nature of these changes. Such changes could be: 1) changes in the type of participants recruited (e.g. inclusion of a group of potentially vulnerable participants), 2) changes to questionnaires, interview guides etc. (e.g. including new questions on sensitive issues), 3) changes to the way data are handled (e.g. sharing of non-anonymised data with other researchers).

In addition, if anything occurs in your project from which you think the SREC might usefully learn, then please do share this information with us.

All ongoing projects will be monitored and you will be obliged periodically to complete and return a SREC monitoring form.

Please inform the SREC when the project has ended.

Please use the SREC's project reference number above in any future correspondence.

Yours sincerely

Professor Emma Renold <u>Chair of School of Social Sciences Research Ethics Committee</u> <u>Ce: Chris Taylor, Mark Connolly</u>



THE QUEEN'S ANNIVERSARY PRIZES IN HERE AN PARTY PRIZES 2015







Registered Charity No. 1136855 Elusen Gofrestredig Rhif. 1136855

Knowledge and Analytical Services



Llywodraeth Cymru Welsh Government

AGREEMENT IN RESPECT OF INFORMATION PROVIDED BY THE WELSH GOVERNMENT

- The Welsh Government has agreed to supply *Cardiff University* ("us", "we") with the information described in clause (ii) of the schedule to this agreement ("the Schedule") on or by *July 2018* for the duration of the period set out under clause (vi) of the Schedule, subject to the terms of this agreement, and subject to the signature by us of this agreement by a duly authorised signatory for and on behalf of *Cardiff University* as described in clause (i).
- We acknowledge that the information may include personal data within the meaning of the Data Protection Act Legislation ("Personal Data"). Clause (v) of the Schedule sets out the applicable legal considerations relating to the use and processing of Personal Data by us.
- 3. After receiving the information we may use it for the purpose(s) specified in clause (iii) of the Schedule, but we will not use it for any other purpose unless the Welsh Government gives us express written permission to do so. We confirm that this purpose is consistent with the aims of National Statistics.
- 4. We will only use the information transfer methods as set out in clause (vii) of the Schedule and will only store the information on a secure area of our network, where:
 - a. the ICT equipment used to access the network is owned and fully managed by us;
 - b. the servers or other ICT equipment used to host the network are protected by up-todate virus-checking software; and a patching regime; with connections to other networks controlled by firewalls;
 - c. the servers (if they exist) reside in a pre-defined location within the EEA with physical and electronic access to those servers controlled and limited to known, authorised individuals only; and
 - d. the network is configured so that access to the information is restricted to the analytical contact and named individuals listed in clause (i) of the Schedule via a password controlled account.

Under no circumstances will the information be stored on a standalone device without such controls, nor will it be stored on removable media without each of hardware encryption; password protection; and separate specific written agreement of the Welsh Government to this. We acknowledge and agree that prior authorisation is needed from the Welsh Government if any data is to be processed outside the EEA.

- 5. We will ensure that all copies (electronic or hard) and backups of the information are managed securely and subject to the same standards as systems holding live information, again with access restricted to the analytical contact and named individuals listed in clause (i) of the Schedule.
- 6. Where the information supplied under this agreement is being processed for statistical and research purposes, we acknowledge that we have read the <u>Code of Practice for</u> <u>Statistics: Principle T6 Data governance³¹</u>, which describes the procedures adopted by the Welsh Government Knowledge and Analytical Services to protect the confidentiality of personal data that it holds and to comply with the provisions of the Data Protection Legislation. We confirm that our use of the information under the terms of this agreement will be in accordance with these procedures and the Data Protection Legislation.
- 7. Subject to paragraph 8, we will not allow any other person or organisation access to the information without obtaining the prior written permission of the Welsh Government and where such permission is given we will ensure that the conditions attached to such permission are met and that the permitted recipient of the information signs an agreement in respect of the information in a form approved by the Welsh Government. The conditions attached to such permission will include details of how we and the third party organisation will ensure that our ethical responsibilities and legal obligations are met during the transmission, storage, analysis, reporting on and (in due course) destruction of the information.
- 8. The restrictions and obligations placed on us by paragraph 7 do not apply in a situation in which we are legally obliged to disclose the information by or under legislation (for example, the Freedom of Information Act 2000), by a rule of law or by an order of a court or tribunal. Once we have a reasonable expectation that such a situation may arise we will as soon as is reasonably practicable notify the Welsh Government of that and provide the Welsh Government with such information as the Welsh Government may reasonably require in order to enable it to make representations to any person about the disclosure of the information.
- 9. We will not publish any of the information or results based on analysis of the information without the prior written approval of the Welsh Government.
- 10. We will comply at all times with the provisions of the Data Protection Legislation in respect of that part of the information that is Personal Data and will not take any steps that could put at risk the confidentiality or security of the information.
- 11. We will comply with all relevant legislation, protocols, codes of practice and ethical guidelines in respect of our use of the information, as set out in clause (iii) of the Schedule. In particular, where the information includes aggregate or anonymised data, we will not attempt to establish the identity of any individual to which the information relates.

³¹ <u>https://www.statisticsauthority.gov.uk/code-of-practice/</u>

- 12. If we become aware that any term of this agreement, or of any agreement entered into under paragraph 7, may have been breached, or we become aware that there may have been a breach of the Data Protection Legislation by any person in relation to the information, we will notify the Welsh Government without undue delay in accordance with paragraph 19. The means by which we will monitor and control for any potential incident is set out in clause (iv) of the Schedule.
- 13. We agree that the Welsh Government may terminate immediately our right to use the information under this agreement, without giving us notice, if it has reasonable grounds to believe that there may have been a breach of any term of this agreement, or of any agreement entered into under paragraph 6, or of the Data Protection Legislation.
- 14. If we have reasonable grounds to believe that there may have been a breach of any agreement entered into under paragraph 7 for us to share the data with a third party, or of the Data Protection Legislation, by any person in connection with such agreement, we will terminate immediately the right of the other party to that agreement to use the information under it.
- 15. If we no longer wish to use the information we may give notice to the Welsh Government advising it of that.
- 16. When the permitted period for our use of the information expires on 30 September 2023 (as further detailed in clause (vi) of the Schedule), or our right to use the information is terminated by the Welsh Government, or where we have notified the Welsh Government that we no longer wish to use the information, we will at our own cost and at the Welsh Government's discretion and direction either:
 - a. destroy or procure the destruction of all of the information in our possession or control, in a way that makes the information unrecoverable, and furnish to the Welsh Government a certificate evidencing destruction in a form acceptable to the Welsh Government; or
 - b. promptly deliver or procure the delivery of all such information to the Welsh Government in accordance with the Welsh Government's reasonable instructions.
 If for any reason we need to retain a copy of any of the information for our records we will agree with the Welsh Government the basis on which such information will be retained and stored.
- 17. We acknowledge that, in providing us with the information, the Welsh Government makes no representations and offers no guarantees as to its completeness, quality or accuracy. We also acknowledge that in no event will the Welsh Government be liable for any loss or damage including, without limitation, indirect or consequential loss or damage, arising from use or loss of use of the information.
- 18. The information supplied under this agreement is Crown copyright and/or may belong to a third party and is being used under licence by the Welsh Government. We acknowledge that any reproduction, copying, broadcasting, adapting or onward supply of Crown copyright and/or third party material beyond the terms of this agreement may be a copyright infringement and will be a breach of the terms of this agreement.

- 19. If we are required by this agreement to give any notification to the Welsh Government, we will send that notification in writing by first class post and e-mail to the main analytical contact at the Welsh Government named in clause (i) of the Schedule.
- 20. We shall maintain complete and accurate records to demonstrate our compliance with the Data Protection Legislation in relation to this agreement. We agree at our own cost to fully participate in any information assurance audit or security assessment implemented by or on behalf of the Welsh Government.
- 21. We shall assist the Welsh Government in responding to any request from a Data Subject (as defined in clause (v.) of the Schedule) and in ensuring compliance with the Welsh Government's obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators.

SCHEDULE

i. Approval

The details of the organisation receiving the information are as follows.

Organisation name	Cardiff University
	CARDIFF
Address	WALES
	UK
Postcode	CF10 3XQ

As the responsible analyst from, and a duly authorised representative acting for and on behalf of the above organisation, I approve the terms of this agreement and I agree that my organisation will abide by all the requirements specified (subject to note 1).

Name	Chris Taylor
Position held	Professor
Signature	
Date	13 July 2018
Phone	029 2087 6938
Email	taylorcm@cardiff.ac.uk

Access to the information will be limited to a main analytical contact and the explicitly named individuals as set out below. As the main analytical contact, I agree on behalf of both myself and these named individuals that the information will neither be shared outside my organisation, nor will it be shared beyond these named individuals.

Name	Nikki Jones
Position held	PhD student
Signature	Nelanes
Date	13 July 2018

Phone	029 20913034
Email	Jonesn68@cardiff.ac.uk

Explicitly named individuals with access to the information:

Name 1	Dr Mark Connolly
Position held 1	Senior Lecturer

As the responsible analyst and duly authorised representative for the Welsh Government and Information Asset Owner in respect of this information, I authorise the provision of access to the information to the receiving organisation under the terms specified in this agreement. I delegate the responsibility to the main analytical contact as set out below for managing the provision of access to the information and to check that the terms specified in this agreement are met (subject to note 1).

Name	Glyn Jones				
Position held	Information Asset Owner				
Signature					
Date					
Phone	03000 256691				
Email	glyn.jones@gov.wales				
Organisation name	Welsh Government Knowledge and Analytical Services				
Address	Floor 4 South, CP2 Crown Buildings Cathays Park Cardiff				
Postcode	CF10 3NQ				

As the main analytical contact for the Welsh Government in respect of this information, I accept the responsibility for managing the provision of access to the information to the receiving organisation and to check that the terms specified in this agreement are met.

Name	Jonathan Ackland
Position held	Assistant Statistician
Signature	
Date	
Phone	029 2082 5968
Email	Jonathan.Ackland@wales.gsi.gov.uk

Note 1

If the data are being processed for official statistics or statistical research purposes The signatories believe this agreement is compliant with the statements of principle in the Code of Practice for Statistics ("the Code") and the specific requirements of the Principle on Data governance (Principle T6). Where this agreement may appear to contradict the statements of principle in the Code or the specific requirements of the Principle T6, the Code and Principle T6 5 take precedence, unless explicitly stated.

ii. Description of the information requested

The data requested is titled 'Evaluating the Foundation Phase' PhD Research and a fuller description follows.

This is a request for administrative schools data from the National Pupil Database (NPD) and Pupil Level Annual School Census (PLASC). See details below and section viii Variable List.

The data requested is crucial to the ESRC Wales DTP research being undertaken on the Foundation Phase at the Institute for Social and Economic Research, Data and Methods (WISERD) based at Cardiff University. The research requires the supply of administrative school data for the purposes of undertaking:

an up to date analysis of pupil performance in National Curriculum (NC) Year 2 of the Foundation Phase, specifically focusing on gaps in the attainment of particular groups of learners;

an exploration of the relationship between previously identified Foundation Phase pedagogical practices and subsequent progress in narrowing attainment gaps in Foundation Phase outcomes within the original 41 WISERD case study schools; and

an exploration of the potential effect of previously identified Foundation Phase pedagogical practices on pupil performance at the end of KS2 and progress in narrowing attainment gaps within the original 41 WISERD case study schools.

The request for administrative school data is detailed in the section viii Variable List (and illustrated in Figure 1) and includes:

2011/12 to 2016/17 (inclusive) NPD/PLASC data relating to all NC Year 2 cohorts of Foundation Phase pupils, including pupil level characteristics and end of Foundation Phase outcomes;

2011/12 to 2016/17 (inclusive) NPD/PLASC school composition data linked to each pupil in 1 above; and

2012/13 to 2016/17 NPD/PLASC data relating to end of Key Stage 2 pupil outcomes and characteristics for all NC Year 6 pupils in these cohorts. This outcome data needs to be linked to school composition data and respective earlier Foundation Phase outcome data for each pupil (acknowledging that Foundation Phase outcome data will only be available for the 2015/16 and 2016/17 cohorts).

The type of Personal Data requested includes the following:

All pupil and school level data will be anonymised and individual pupils will not be identifiable. Please see section viii Variable List for further details.

This includes the following data identified as falling into one of the special categories of Personal Data under the Data Protection Legislation: *N/A. Whilst the request includes ethnic origin, all pupil and school level data will be anonymised and individual pupils will not be identifiable.*

Special categories of data will be dealt with in accordance with clause (v).

The data relates to the following categories of Data Subjects: Schools and School Pupils

Only the variables that are essential for the stated purpose as set out in clause (iii) will be provided and the variables requested (where applicable) are listed in clause (x).

iii. Purpose for which the information is requested

We are requesting the data for the following purposes: Data from the National Pupil Database is required to examine the attainment of NC Year 2 and NC Year 6 cohorts of pupils whom have experienced the Foundation Phase. The data requested relate to: (a) the demographics of pupils; (b) teacher assessment; and (c) school attendance. This data is required to provide key explanatory variables for use in models that seek to explain variations in levels of attainment within different schools and across various population subgroups.

The NC Year two 2011/2012 cohort was the first complete cohort of pupils in Wales to experience the Foundation Phase. The request for the 2011/2012 NC Year two cohort and subsequent cohort data allows for a robust analysis of Foundation Phase attainment and progress over time, particularly for certain population subgroups.

Anonymised pupil level data and associated Foundation Phase outcomes are required to explore whether the levels of inequalities among different population subgroups that were identified by the original WISERD evaluation of the Foundation Phase have changed following a further five years of Foundation Phase implementation. It will enable the exploration of whether further training, support, sharing of best practice, an extended period of time for principals and pedagogy to embed and, more recently, the Welsh Government's Foundation Phase Action Plan, have impacted gaps in attainment between different population subgroups and reduced variation between schools.

Key Stage 2 data for the first two complete cohorts to experience the Foundation Phase are also required to explore whether gaps in attainment for population subgroups change during Key Stage 2 (i.e. whether Key Stage 2 is associated with a widening or a narrowing of gaps in particular subjects following the implementation of the Foundation Phase). This data will be linked to Foundation Phase outcomes for these two cohorts to enable an evaluation of changes and potential progress over time. The addition of pupil and outcome data for the 2012/13 to 2014/15 NC Year 6 cohorts, will enable a detailed comparison of subgroup progress at Key Stage 2 for pupils who were exposed to the Foundation Phase compared to previous cohorts who were not. This analysis will help indicate whether there are observable potential impacts of the Foundation Phase at Key Stage 2 for various subgroups. NC Year 2 Foundation Phase outcome data and NC Year 6 Key Stage 2 outcome data for the above cohorts within the original 41 WISERD case study schools will also be used to explore whether certain pedagogical practices identified in the WISERD evaluation are associated with attainment five years on, and with gaps in attainment between population subgroups in particular. The results of this analysis will assist with the identification of potential settings for qualitative case-study research.

The nature of the processing of the data will be as follows: n/a.

iv. Ensuring access to the information is controlled and limited to named contacts (including cyber essentials certificated details if relevant)

Any information relating to this agreement will be immediately transferred to our secure network. We will store the data on a secure area of our network with access restricted to the analytical contact and named individuals listed in clause (i) of the Schedule. Where any hard copies of data are made, these will be kept secure with access restricted to the analytical contact and named individuals listed in clause (i) of the Schedule.

At the end of the period for which the Information is provided, we will securely delete all electronic and hard copies of the Information.

Any files containing information which could identify individuals, or personal contact details, will be immediately transferred to our secure network, specifically to an area in which only the named contacts (and network administrators) have access. We shall ensure such persons are subject to obligations to keep any Personal Data confidential.

Access to this data can only be granted through a written request for access to the network area from the responsible analyst. This is implemented by a network administrator only on receipt of that authorisation.

The permissions to access the data will be set up so that they are automatically withdrawn every two weeks and will need to be requested again. Each time the requests are renewed, the responsible analyst will ask the network administrator to confirm that no additional unnamed persons have been granted access to the files in the preceding period. If this checking process reveals that access to additional unnamed persons has been granted — highly unlikely - logs will be interrogated to check if there has been any unauthorised use of the information files. As soon as any such use is discovered, it will be immediately reported to the Welsh Government along with a report of how that access has occurred, whether accidentally or deliberately.

No third party may be appointed to assist with the processing of any Personal Data under this agreement without the prior written approval of the Welsh Government and provided that such sub-processor is engaged on terms no less onerous than those set out in this agreement. We acknowledge that we shall remain liable for all acts or omissions of any subprocessor.

v. Data Protection Legislation and other legal considerations

The legal basis for processing information under this agreement is Agreement is not relating to personal data as information is anonymised.

Both parties to this agreement will comply with all applicable requirements of the Data Protection Legislation and ensure the protection of the rights of the Data Subject.

Agreement is not relating to personal data as information is anonymised.

For the purposes of this agreement the following terms shall have the following meanings:

- (a) "Data Protection Legislation" shall be defined as follows: "the General Data Protection Regulation (Regulation (EU) 2016/679) ("GDPR"); the Data Protection Act 1998; the Law Enforcement Directive (directive (EU) 2016/679) and any national implementing legislation from time to time; the Data Protection Act 2018 (subject to Royal Assent) to the extent that it relates to the Processing of Personal Data and privacy and all applicable laws and regulations relating to Processing of Personal Data and privacy, including where applicable the guidance and codes of practice issued by the Information Commissioner; and references to any statute or statutory provision shall include any statute or statutory provision which amends or replaces or has amended or replaced such statute or statutory provision and shall include any subordinate legislation made under the relevant statute"; and
- (b) "Controller, Processor, Data Subject, Personal Data and Process" shall have the meaning given to them in the applicable Data Protection Legislation.

We agree to indemnify and keep indemnified the Welsh Government against all claims and proceedings and all liability, loss, costs and expenses incurred in connection therewith by the Welsh Government as a result of any claim made or brought by any individual or other legal person in respect of any loss, damage or distress caused to that individual or other legal person as a result of our unauthorised processing, unlawful processing, destruction of and/or damage to any Personal Data processed by us or our employees or agents in our performance of our obligations under this agreement or as otherwise agreed with the Welsh Government.

This agreement may be revised by the Welsh Government at any time on not less than 30 working days' notice to ensure compliance with the Data Protection Legislation; including any guidance issued by the Information Commissioner.

In the event that we and the Welsh Government are working together to determine the purposes and means of data processing so that we may be considered joint controllers, the parties to this agreement shall make any such joint controller arrangements (including the parties' respective roles, responsibilities and obligations relating to Data Subjects) clear and transparent in accordance with Article 26 GDPR.

[To the extent that any data disclosed under this agreement falls into one of the special categories of personal data as defined in Article 9(1) of the GDPR, the processing of such sensitive personal information will be proportionate to the aim pursued, respect the

essence of the right to data protection and provide for suitable and specific measures to safeguard the Data Subjects' fundamental rights and interests in accordance with Article 9 GDPR.]

[All respondents who have provided, or will provide, sensitive personal information in relation to any activities carried out under this agreement have been informed – as appropriate for the project in question - that their information will be used to support research by the Welsh Government, on behalf of Welsh Government, or research for which the Welsh Government has approved the use of this data.]

The relevant legal powers of the Welsh Ministers pursuant to which this research is being undertaken are set out in n/a.

vi. Timescale

The information will be released and made available by the Welsh Government for the period from *July 2018* to September 2023 as set out in this signed agreement.

vii. Information transfer method

Information will be transferred as a csv file using the iShare shared workspace area.

viii. Variable list

A) NPD/PLASC data is requested for all pupils within the following NC Year 2 Foundation Phase cohorts:

2011/2012	2014/2015
2012/2013	2015/2016
2013/2014	2016/2017

The NPD/PLASC data requested for these cohorts are detailed in the following table:

Pupil Level Variables for all	Individual Pupil Outcomes*	School Level Variables				
pupils in each	linked to each pupil in each	linked to each pupil in each				
(anonymised)	cohort	cohort				
Pupil identifier	Pupil identifier	School ID				
Gender	Mathematical Development	Medium of instruction				
Ethnicity	Language Literacy and	Postcode				
FSM eligibility (eFSM)	Communication	% of all pupils with eFSM				
Age in months	Personal and Social	% of all pupils with SEN				
EAL status	Development, Wellbeing and	% ethnicity of all pupils				
SEN status	Cultural Diversity	% of all pupils with EAL				
Repeat absenteeism (15% of	Foundation Phase Outcome	Number on roll				
1/2 day sessions or more)	Indicator	LEA				

*Please note that this Foundation Phase outcome data for all pupils within the 2011/2012 and 2012/2013 cohorts needs to connect to later Key Stage 2 outcome data for these pupils.

B) NPD/PLASC data is requested for all NC Year 6 pupils within the following Key Stage 2 cohorts:

2012/2013	2015/2016
2013/2014	2016/2017
2014/2015	

The NPD/PLASC data requested for these cohorts are detailed in the following table:

Pupil Level Variables for each cohort (anonymised)	Individual Pupil Outcomes* linked to each pupil in each cohort	School Level Variables linked to each pupil in each cohort	
Pupil identifier Gender Ethnicity FSM eligibility (eFSM) Age in months EAL status SEN status Repeat absenteeism (15% of ½ day sessions or more)	Maths English/Welsh	School identifier Medium of instruction Postcode % of all pupils with eFSM % of all pupils with SEN % ethnicity of all pupils % of all pupils with EAL Number on roll	

*Please note that this Key Stage 2 outcome data for all pupils needs to connect to their respective earlier Foundation Phase outcome data.

Pupils at end of year 2/FP in:	Pupil Level Data	Associated FP Outcomes		School Level Data	Pupils at end of year 6/KS2 in:	Associated KS2 Outcomes
	Pupil			School ID	2012/2013	
	identifier*					
				Language of	2013/2014	Maths
	Gender			instruction		
					2014/2015	English/
	Ethnicity			Postcode		Welsh
2011/2012					2015/2016	
	eFSM status			% eFSM		
2012/2013		MD			2016/2017	
	Age (months)			% SEN		
2013/2014		LLC				
	EAL status			% ethnicity		
2014/2015		PSDWCD				
	SEN status			% EAL		
2015/2016		FPOI				
	Repeat			NOR		
2016/2017	absence			LEA		
* Unique identifier rather than pupil name						
Grey and yellow horizontal shading represents data linkage (pupil, outcome and school related)						
The two yellow shaded cohorts to be linked all the way through from FP outcomes to KS2						

Figure 1: Quantitative Analysis Design

Appendix C: Impact of the Covid-19 pandemic on the research design

Case study fieldwork, including classroom observations in a number of schools in Wales was scheduled to begin in April 2020 and completed by the end of June 2020. However, the national response to the pandemic involved the closure of schools for the whole of this period, so the case study research during this period was prevented. Contingency dates were arranged with all case study headteachers for the autumn term prior to the summer holidays, when it was anticipated that schools would be accessible again. All schools were then written to in the Autumn to ascertain if they were still able to accommodate the research but also giving them the option to change the timetable, withdraw from any element or, indeed, withdraw from the research altogether.

While all schools continued to support the research, new guidance to schools emerged and placed limitations on school visitors. This prevented the case study visits from taking place in the Autumn as well. It was not anticipated that the rescheduled date of the Autumn would also be problematic. Cardiff University also took the decision to halt all face-to-face research and I was informed that Welsh Government's operational guidance to schools was unlikely to change for the following 6 months, which would mean a delay of a year with still no guarantee I would get to do the observations. It therefore became clear that a commitment could not be made to classroom observations while the pandemic was ongoing. Even if I had been able to access classrooms, advice to schools had included exclusively forward-facing teaching and I was informed that practice did not resemble typical FP pedagogy.

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The research focus and design were therefore revised, and the number of case study schools and planned interviews were expanded with the intention that they would be conducted remotely. However, recruiting new participants and arranging the interviews were hampered by new local lockdowns and staff and class absences as COVID-19 cases began to rise again towards the winter. As the situation was unprecedented, there was little time to create mitigation plans and although action was taken as soon as reasonably possible, a significant amount of time had elapsed from the initial rescheduling of the fieldwork to the Autumn. This meant that the case study component of the research was not undertaken until the very end of 2020, significantly later than originally intended.

Appendix D: Foundation Phase Lead Practitioner Survey and invitation to participate

Dear Head Teacher

I am writing to invite your school to take part in the National Foundation Phase Lead Practitioner Survey being undertaken by Cardiff University. The survey is part of a larger PhD investigation which evaluates the implementation of the Foundation Phase across Wales. The research is supported by the Welsh Government and builds on the National evaluation of the Foundation Phase undertaken by WISERD and published by the Welsh Government in 2015 (https://gov.wales/statistics-and-research/evaluation-foundation-phase/?lang=en).

The current invitation to take part only concerns the survey element of the research. This is an important feature of the wider investigation and is being sent to all schools and settings with responsibility for the Foundation Phase across Wales. We very much hope that you feel willing and able to contribute to this research by forwarding the invitation to the member of staff with specific responsibility for the Foundation Phase in your school. This could be the Head Teacher, a deputy Head Teacher, Foundation Phase Lead Practitioner or another member of staff with the most responsibility for its implementation and day to day management.

The aim of the survey is to obtain a national picture of how the Foundation Phase is currently viewed and implemented in Wales. It elicits perceptions about implementing, managing and working within the Foundation Phase, perceived impacts on children and some of the challenges faced. Please note that this is *not* an assessment of the school and the survey does not collect any personal or school-identifiable data. Responses are completely anonymous, are aggregated prior to analysis and will be stored securely at Cardiff University. The research has been approved by the Cardiff University School of Social Sciences Ethics Committee and will conform to professional codes of practice.

To ensure that participation is as easy and convenient as possible, the survey is being conducted online. It is available in Welsh or English, can be completed on a PC, tablet or mobile phone and should take about 10 minutes to complete. The link to the survey is: <u>https://socsi.gualtrics.com/jfe/form/SV_6|1616DPEeighLvxw9</u>

Your school's participation will be enormously valuable in helping to improve our understanding of the way that educational policy like the Foundation Phase is implemented, and, importantly, has the potential to help further shape the Foundation Phase in Wales.

We do hope that you can assist us and thank you in advance for taking the time to read this email. In the meantime, if you have any questions regarding the survey, or any other element of the research, then please do not hesitate to contact me.

With kind regards and very best wishes,

Nikki Jones Researcher, Cardiff University Jonesn68@Cardiff.ac.uk

Reminder Email Letter

We recently wrote to you asking your school to take part in the national Foundation Phase Lead Practitioner Survey being undertaken by Cardiff University. Thank you to all of you who have already done so. It is crucial that we capture as many views as possible and your responses are key to providing a clear picture of opinion and delivery of the Foundation Phase across Wales.

As the survey is completely anonymous, we cannot determine who has participated so far. We are therefore recirculating the original request together with the project information, as a gentle reminder to all schools in Wales. and ask that your lead Foundation Phase practitioner takes a few minutes to complete the survey through the link below.

It is really important to capture as many views as possible, but we can only do this with your support. We are therefore extremely grateful of the time you provide through participation. I have included the original explanation of the research below for your information:

Foundation Phase Lead Practitioner Online Survey:

What is the background to the survey?

This survey is being carried out by Cardiff University and is part of a wider PhD investigation which explores the ongoing implementation of the Foundation Phase. It is funded by the Welsh Government and ESRC and builds on the National evaluation of the Foundation Phase undertaken by WISERD and published by the Welsh Government in 2015 (the Final Report and summaries are available at https://gov.wales/statistics-and-research/evaluation-foundation-phase/?lang=en). We are now working with the Welsh Government to obtain up-dated evidence and data on the implementation of the Foundation Phase in Wales.

Who is the survey for?

All members of staff with specific responsibility for the Foundation Phase in Wales. This might be the Head Teacher, a deputy Head Teacher, Foundation Phase Lead Practitioner or another member of staff who has the most responsibility for its implementation and day to day management.

What is the aim of the survey?

To obtain a national picture of perceptions and delivery of the Foundation Phase in Wales. It asks for your views about implementing, managing and working within the Foundation Phase and about delivery in your school. Please note that this is not an assessment of the school, there are no right or wrong answers and no personal or school-identifiable data is requested.

How do I complete the survey?

It is really important for us to gain a representative sample of views, experiences and opinions, both positive and negative. We therefore ask that you try and answer as honestly as you can. If for any reason you feel unable to answer a question please leave it blank and move on to the next one. **It should take no longer than 10 minutes** to complete.

How will survey response data be used?

As the survey does not collect any personal details about you, the data you provide will remain anonymous, be securely stored and aggregated prior to analysis. Statements provided in open-ended questions may be included as quotations in research outputs. The research has been approved by the Cardiff University School of Social Sciences Ethics Committee. Data will be kept for 5 years and then destroyed in accordance with GDPR 2018.

How do I give my consent to take part?

By completing this survey you are agreeing to participate in this research. Thank you for sharing your time and helping to improve our understanding of the implementation of and opinions on the Foundation Phase in Wales.

If you have any questions, please don't hesitate to contact me.

With many thanks and very best wishes, Nikki Jones, WISERD, Cardiff University, <u>FPleadsurvey@cardiff.ac.uk</u>

Q1 All things considered, how satisfied are you with the Welsh Government's policy for the Foundation Phase? (Please indicate on a scale of 1 to 6)

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	
Not satisfied at all	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	Completely satisfied

Q2 Overall, what impact do you think the Foundation Phase has had on the following areas in this school?

	Positive (1)	It has made no difference (2)	Negative (3)
Attendance (1)	0	\bigcirc	\bigcirc
Children's behaviour (2)	0	\bigcirc	\bigcirc
Literacy skills (3)	0	\bigcirc	\bigcirc
Numeracy (4)	0	\bigcirc	\bigcirc
Pupil wellbeing (5)	0	\bigcirc	\bigcirc
Attitudes to learning (6)	0	\bigcirc	\bigcirc
Narrowing attainment gaps (7)	0	\bigcirc	\bigcirc
Transitions to Key Stage 2 (8)	0	\bigcirc	\bigcirc
Achievements at Key Stage 2 (9)	0	\bigcirc	\bigcirc
Other, please specify: (10)	0	\bigcirc	\bigcirc

_ _ _ _ _ _

	Advantaged (1)	No difference (2)	Disadvantaged (3)
Boys (1)	0	0	0
Girls (2)	\bigcirc	\bigcirc	\bigcirc
Children with special educational needs (3)	\bigcirc	\bigcirc	\bigcirc
Children not being educated in their first language (4)	\bigcirc	\bigcirc	\bigcirc
Black minority ethnic children (5)	\bigcirc	\bigcirc	\bigcirc
Children living in poverty (6)	\bigcirc	\bigcirc	\bigcirc
Children from advantaged backgrounds (7)	\bigcirc	\bigcirc	\bigcirc
Summer-born children (8)	\bigcirc	\bigcirc	\bigcirc
Other, please specify: (9)	\bigcirc	\bigcirc	\bigcirc

Q3 Do you think any of the following groups of children have been particularly advantaged or disadvantaged by the Foundation Phase? (Please tick all those that apply)

Q4 Thinking about the adult-child ratios in the Foundation Phase in this school, please indicate the approximate number of pupils per adult most commonly found in the following year groups:

Approximate number of children per adult in Nursery and Reception classes (1) Approximate number of children per adult in Year 1 and 2 classes (2) Q5 Thinking about changes in adult-to-child ratios over the last five years in this school, would you say that they have improved, stayed the same or worsened?

Improved (1)
 Remained the same (2)
 Worsened (3)
 Don't know (4)

Q6 Has this had a negative impact on how the Foundation Phase is delivered?

• Yes (1) O Maybe (2) O No (3)

Q7 The Estyn 2016-2017 Annual Report noted that after initially trying active and experiential learning in Year 1 and 2, many schools had 'reverted to approaches that are more formal'. To what extent do you agree this has been the case in this school?'

 \bigcirc Strongly agree (1) O Agree (2) O Disagree (3) Strongly disagree (4) O Don't know (5)

Q8 Are you familiar with the Foundation Phase Excellence Network (FPEN) Zone available on Hwb?

Yes (1)No (2)

Q9 Have you used any of the following from the FPEN Zone on Hwb (please tick all that apply):

Resources (1)
Foundation Phase Case Studies (2)
Partners Section (3)
Other, Please specify (4)

Q10 Please indicate how familiar you are with the following:

	Very familiar (1)	Familiar (2)	Vaguely familiar (3)	Not at all familiar (4)
Foundation Phase Action Plan (Welsh Government, 2015) (1)	0	0	0	0
The 'Pedagogical Principles' detailed in the above plan (2)	0	\bigcirc	\bigcirc	\bigcirc

Q11 The next series of questions look at how deeply the pedagogical principles outlined in the Foundation Phase Action Plan are embedded within this school.

	All of the time (1)	Most of the time (2)	Some of the time (3)	Rarely (4)	Never (5)
Exercise choice, participate, become involved, initiate and direct their own learning (1)	0	0	0	0	\bigcirc
Learn from first-hand, exploratory, practical, hands-on activities (2)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Receive appropriate challenge and support from the adults and learning environment, to enable good progress (3)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Thinking about how children learn in the Foundation Phase, to what extent do the children in this school:

Q12 Thinking about all the learning environments that make up the Foundation Phase in this school (including indoors and outdoors), how many provide:

	All (1)	Most (2)	Some (3)	Very few (4)	None (5)
Flow between continuous, enhanced and focused activities (1)		\bigcirc	0	\bigcirc	0
Access to resources that enable choice and develop independence in learning (2)	I	\bigcirc	\bigcirc	\bigcirc	0
Space that enable children to apply, use, consolidate and extend their skills across areas of learning (3)	I	\bigcirc	0	\bigcirc	0
Opportunities for children to be physically and cognitively active and have quiet time for contemplation and thought (4)		0	\bigcirc	\bigcirc	\bigcirc

Q13 Thinking about the ways that Foundation Phase practitioners work in this school, how many:

- - - - - - -

	All (1)	Most (2)	Some (3)	Very few (4)	None (5)
Prompt the child to think and reflect, extending learning when appropriate (1)	(0	\bigcirc	0	0
Plan developmentally appropriate, engaging learning opportunities informed by regular observation and assessment of the child's abilities (2)	(0	0	\bigcirc	0
Actively engage parents/carers in the school community, seeing them as partners in their child's learning (3)	(\bigcirc	\bigcirc	0	0
Continuously develop themselves professionally, sharing and learning from good practice and working with practitioners outside of the school (4)	(\bigcirc	0	0	0
Engage in 'Sustained Shared Thinking' with each child (working together to solve a problem, clarify a concept, evaluate activities or extend a narrative) (5)	(0	0	\bigcirc	\bigcirc
	I				

Q14 The next series of questions look at how easy it is to realise these pedagogical principles in practice.

	Very easy (1)	Quite easy (2)	Quite difficult (3)	Very difficult (4)
Exercises choice, participates, is involved, initiates and directs their own learning (1)	0	\bigcirc	\bigcirc	0
Learns from first-hand, exploratory, practical, hands- on activities (2)	0	\bigcirc	\bigcirc	\bigcirc
Is appropriately challenged and supported by the adults and learning environment, to enable good progress (3)	0	\bigcirc	\bigcirc	\bigcirc

In the Foundation Phase, how easy is it to ensure that the child:

Q15 How easy would you say it is to ensure that all Foundation Phase learning environments (including indoors and outdoors) provide:

	Very easy (1)	Quite easy (2)	Quite difficult (3)	Very difficult (4)
Flow between continuous, enhanced and focused activities (1)	0	0	0	0
Access to resources for children that enable choice and develop independence in learning (2)	0	0	\bigcirc	\bigcirc
Space that enable children to apply, use, consolidate and extend their skills across areas of learning (3)	0	\bigcirc	0	\bigcirc
Opportunities for children to be physically and cognitively active and have quiet time for contemplation and thought (4)	0	\bigcirc	\bigcirc	\bigcirc

How easy do you think it is for Foundation Phase practitioners to:

	Very easy (1)	Quite easy (2)	Quite difficult (3)	Very difficult (4)
Prompt the child to think and reflect, extending their learning when appropriate (1)	0	\bigcirc	0	\bigcirc
Plan developmentally appropriate, engaging learning opportunities informed by regular observation and assessment of the child's abilities (2)	0	\bigcirc	0	\bigcirc
Actively engage parents/carers in the school community, seeing them as partners in their child's learning (3)	0	0	\bigcirc	\bigcirc
Continuously develop themselves professionally, sharing and learning from good practice and working with practitioners outside of the school (4)	0	\bigcirc	\bigcirc	\bigcirc
Engage in 'Sustained Shared Thinking' with each child (working together to solve a problem, clarify a concept, evaluate activities or extend a narrative) (5)	0	\bigcirc	\bigcirc	\bigcirc

	Very negative (1)	Slightly negative (2)	No impact (3)	Slightly positive (4)	Very positive (5)
National Reading and Numeracy Tests (1)	0	0	0	\bigcirc	0
The Literacy and Numeracy Framework (2)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
The Digital Competency Framework (3)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Foundation Phase Action Plan (4)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Foundation Phase Profile (5)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
End of Foundation Phase Assessments (6)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
School Categorisation (7)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
ESTYN Inspection Framework (8)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Regional Consortia Challenge Advisor (9)	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
Other, please specify: (10)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Q17 What kind of impact, if any, do you feel the following have had on how the Foundation Phase is implemented in this school?

Q18 Have any of the following been experienced as particular obstacles to enacting the Foundation Phase in this school? (Please tick all that apply)

Funding and resources (1)
Existing school building and facilities (2)
Achieving the recommended adult:child ratios in all years (3)
Lack of parental engagement (4)
Adjustment of staff (5)
Clarity about the Foundation Phase (6)
Other things happening within the school (7)
The particular needs of children in this school (8)
Poverty (9)
Pupil behaviour (10)
Other, please specify: (11)
No particular obstacles experienced (12)

Q19 What would you say has been the single biggest obstacle to enacting the Foundation Phase in this school? (Please select one answer only)

 Funding and resources (1)
\bigcirc Existing school building and facilities (2)
\bigcirc Achieving the recommended adult:child ratios in all years (3)
 Lack of parental engagement (4)
O Adjustment of staff (5)
\bigcirc Clarity about the Foundation Phase (6)
\bigcirc Other things happening within the school (7)
\bigcirc The particular needs of children in this school (8)
O Poverty (9)
O Pupil behaviour (10)
Other, please specify: (11)

Q20 To what extent do you think that the Foundation Phase is still important to the Welsh Government?

_

 \bigcirc It is still very important (1)

 \bigcirc It is still important but they seem to have other priorities (2)

 \bigcirc It is no longer important to the WG (3)

O Don't know (4)

Appendix E: Foundation Phase Pedagogical Principles

The pedagogical principles of the Foundation Phase should focus on:

the child:

- exercising choice, participating, being involved, initiating and directing their own learning over a period of time
- learning from first-hand, exploratory and practical, hands-on activities
- being appropriately challenged and supported by the adults and learning environment, so that good progress is made

a learning environment:

- which provides flow between continuous, enhanced and focused activities, located indoors and outdoors, that reflect and engage children's interests
- that allows children access to resources that enable them to use choice and develop independence in their learning
- which enables children to apply, use, consolidate and extend their skills across Areas of Learning and Experience
- that includes opportunities for children to be physically and cognitively active as well as having 'quiet time' for contemplation and thought

practitioners:

- who prompt the child to think about and reflect upon their learning experiences in order to extend their learning when appropriate
- who plan developmentally appropriate, engaging learning opportunities informed by regular observation and assessment of children's abilities
- who actively engage parents/carers in the setting/school community, seeing them as partners in their children's learning
- who look to continuously develop themselves professionally, sharing and learning from excellent and effective practice and working with other practitioners across Wales and further afield.

Copied from the Foundation Phase Action Plan Welsh Government, 2016, p.8

Appendix F: Invitation letters and information papers for case study schools

Sefydliad Ymchwil Cymdeithasol ac Economaidd a Data Cymru Wales Institute of Social and Economic Research and Data

Newid tirwedd ymchwilio yng Nghymru Changing the research landscape in Wales

Headteacher name School Address



38 Plas-y-Parc I Park Place Caerdydd I Cardiff CF10 3BB

Dear (*headteacher's name*)

Cardiff University Foundation Phase Research

As you may remember, Cardiff University was commissioned by the Welsh Government in 2012 to undertake a detailed evaluation of the Foundation Phase, which was published in 2015. An essential component of the research involved a number of schools across Wales taking part as 'case studies' and your school was one of these. I am now undertaking a much smaller study, supported by the Welsh Government and Economic and Social Research Council, as part of my PhD candidature. The research requires me to visit a small number of the original case study schools and I am writing to ask whether you would consider taking part again. Whilst the purpose of my study is similar to the original evaluation, there are fewer tasks involved for schools this time. The aim is to gather in-depth information about how the Foundation Phase is currently implemented and canvass existing opinion about its strengths, weaknesses and associated challenges.

Participating as a case study in the research will involve, if possible, an interview with yourself and a number of willing Foundation Phase practitioners. It will also involve no more than 6 classroom observations looking at how the Foundation Phase is delivered in each year group. It is important to stress that the research is not focused on individual children, but rather on the classroom environment and learning activities as a whole. It does not require any interactions with children and will not prevent any normal daily activities from taking place. I will remain as unobtrusive as possible and the classroom observations will not interfere with teaching or learning. The main time commitments will be the interviews with members of staff, which may last up 30 minutes each, whilst observations should take no longer than four days to complete. I therefore hope to complete the case study within one week.

It is important to note that observations do not assess individual members of staff, rather the aim is to understand how the Foundation Phase as a policy, is understood and delivered. Observing classroom activities and talking to practitioners are essential to understanding and evaluating Wales' educational policy for three to seven year olds. Similarly, your school **will not** be assessed by the research. My interest is in hearing about your school's more recent experiences and views of the Foundation Phase as an educational policy within the current policy climate. As in the first evaluation all information collected will be completely anonymised and neither your school, your staff or your pupils will be named in or identifiable from any of the research outputs or publications.

I appreciate that this is a substantial commitment but hope that you will consider taking part. As the final results of the research are of interest to the Welsh Government, your participation has the potential to help shape the future of the Foundation Phase in Wales, as well as being of tremendous benefit to my research.

Whilst this letter provides you with a brief summary of the research and what is involved in taking part, I would like to arrange to telephone you at a convenient time to discuss potential participation further and answer any questions you may have. However, I fully appreciate that you may wish not to be contacted again and enclose an 'opt out' form with a pre-paid envelope should this be the case. If it is more convenient, please feel free to email me. If I do not hear from you by Monday 9th March, I will assume it is okay to call you. I have enclosed a project background sheet for your information.

I do hope that you are able to support the research and very much look forward to talking to you.

Yours sincerely

Nikki Jones



Mae WISERD yn gydweithrediad rhwng pum prifysgol yng Nghymru ac fe'l dynodwyd gan Lywodraeth Cymru'n Ganolfan Ymchwil Genedlaethol

WISERD is a collaboration between five universities in Wales and has been designated by the Welsh Government as a National Research Centre



Key Features of the Research

- A national survey of Foundation Phase Lead Practitioners
- Interviews with key policy makers and strategic advisors in national and local government from across Wales
- Teacher interviews from a range of primary schools in Wales
- A number of in-depth case studies from a range of primary schools in Wales
- A series of snap-shot classroom/school observations across year groups and times of day
- Analysis of children's educational outcomes under the continuation of the Foundation Phase
- Evaluation of progress towards closing attainment gaps between groups of learners under the continuation of the Foundation Phase
- Investigation of the variation between schools in pupil outcomes across Wales
- Exploration of the variation in school-based progress towards closing gaps between learners during the continuation of the Foundation Phase across Wales
- Utilisation of PLASC and Pupil Attainment Data throughout the analysis

For more information please contact: Nikki Jones WISERD, Cardiff University **38 Park Place** Cardiff **CF10 3BB** Wales Email: JonesN68@cardiff.ac.uk

WISERD, Cardiff University Foundation Phase Research Background Information

This research forms part of a PhD study and is supported by the Welsh Government and Economic and Social Research Council (ESRC). It builds on the national evaluation of the Foundation Phase conducted by WISERD, Cardiff University and commissioned by the Welsh Government in 2012.

The research looks at how the Foundation Phase is currently delivered in Wales, through visits to a number of 'Case Study' schools that took part in the original evaluation commissioned by the Welsh Government. It also aims to gather information on current perceptions of the Foundation Phase policy, including its strengths and weaknesses and some of the challenges faced in its implementation.

Case study visits involve spending time in Foundation Phase classrooms looking at the ways in which the Foundation Phase is delivered by practitioners and how different resources and areas of the school are used. Visits will also involve interviews with willing Foundation Phase practitioners, to gather information on perceptions of the policy and its implementation. It is important to stress that observations are not focused on individual children, but rather on the class environment and learning activities as a whole. Observing classroom activities and talking to practitioners are essential to understanding, evaluating, and potentially, helping to shape the future of the Foundation Phase in Wales.

I am an experienced researcher, have worked within Foundation Phase classrooms on a voluntary basis and have been a primary school governor for over 10 years. I have the required Criminal Records Bureau clearance to work in schools and will also carry a university photo identification badge at all times. The research is guided by the director of the original Welsh Government Commissioned Foundation Phase evaluation, Professor Chris Taylor and is supported by a number of experts in the field of educational research. It has been approved by the Cardiff University School of Social Sciences Ethics Committee and will strictly adhere to professional codes of practice. All data collected will be stored securely, retained for 5 years and destroyed in accordance with GDPR (2018). All participants will have the right to withdraw from the research at any time.

Any comments you have concerning my research are valued, please feel free to comment or ask questions at any stage.

For more information please contact: Nikki Jones, PhD Researcher WISERD, Cardiff University **38 Park Place** Cardiff **CF10 3BB** JonesnN68@Cardiff.ac.uk

WISERD, Cardiff University Foundation Phase Research Opt out of further contact form

Please tear off the slip and return in the pre-paid envelope.

Sorry, but I do not think that our school will be able to take part in this research, please do not contact me to discuss it further.

Head Teacher Name	
Signature	
~ '	
Jate	•

Please return the form by 09.03.2020 to register your preference to ensure that you are not approached again.



Mae WISERD yn gydweithrediad rhwng pum prifysgol yng Nghymru ac fe'l dynodwyd gan Lywodraeth Cymru'n Ganolfan Ymchwil Genedlaethol

WISERD is a collaboration between five universities in Wales and has been designated by the Welsh Government as a National Research Centre


Central Questions

- Thank you for taking part.
- Can you confirm that you've read the info for participants and are still happy to proceed?
- Can I ask again if you are happy for me to audio record the interview so I can focus on discussion? Reassure it can be switched off at any time and data will be anonymised.
- So, my research interest is in the **approach to learning in the FP** compared with the more traditional approach of KS1.
- I would really like to understand the FP from your point of view, in terms of how you deliver it, the impact you think it has, what challenges you face and any strengths and weaknesses you feel it has as a policy. I'm also interested in how the policy appears to suit pupils from deprived backgrounds.

Basic background

- Can I ask how long have you worked in the FP?
- How long have you been FP lead/FP Teacher?
- How long have you worked in this school?

FP Delivery

- How would you describe a typical day in the FP, what would it *look* like in practice in your class say from 9 until 3?
 - Where is the majority of your time spent focused tasks/EP/CP, OUTSIDE?
 - Where is the majority of pupil time spent focused tasks/EP/CP, OUTSIDE?
 - How much of learning in a day is child directed/ what is the balance between adultdirected/child-directed and adult initiated/child-initiated activities is like in your class?
 - Is this similar to other FP classes in the school or do they differ? / same balance in different year groups?
- How has FP practice in your class changed over the last 5 years or so? (Prompt Estyn observation in some classrooms: reverted from more active and experiential styles of learning back to more formal ones?)
- What would you say have been the main reasons for these changes in your class/other classes in your school?
- Is there anything that gets in the way of delivering the FP how would personally like to? (in other classrooms?)
- Evaluation found that pupils in schools in deprived areas were more likely to be learning basic skills (like L&N) than learners in more affluent schools. They were also more likely to be engaged in adult directed activities or following adult instructions. But there were also schools where this was not the case.

- Do you think the learning needs of children from disadvantaged backgrounds (affected by poverty) tend to be different from more affluent peers?
 - o (please describe how?)
- Do you think the best ways to develop them tend to be different/require a different approach?
 - o (please describe how?)

Impact of FP

- Are there any groups of learners that you think have particularly benefited from the approach to learning embedded in the FP?
 - In what ways? (P: LLCC/MD/PSD wellbeing/behaviour, cooperative skills, attendance, disposition etc)?
- And do you feel any groups in particular have been disadvantaged or held back?
 What do you think the reason for these impacts might be?
- Thinking about pupils from disadvantaged backgrounds now, how would *you* describe the ways in which the approach to learning in the FP has impacted them/pupils experiencing poverty? This includes any positive and/or negative impacts. (p: explore academic and soft skills etc.)
 - Can you think of any features of the approach that impede or enhance the learning of eFSM pupils?
- What impact do you think FP has had on attainment gaps based on eligibility for FSM at O5?
 Why do you think that might be?
- What about O6?
 - Why do you think that might be?
- What do you think might help reduce gaps?
- Do you do anything in particular that targets pupils from disadvantaged backgrounds/eligible for FSM in their learning?
 - o 05/06?

General (Last few questions)

- Do you feel the benefits of learning in the FP are captured by the end of phase assessments in Y2 (other)?
- What do you feel are the main strengths or benefits of the FP as an educational policy for three-seven year olds (P: What do you *like* about it?)
- What do you feel are the main weaknesses /can you think of any areas for improvement or elements that you'd rather leave out and replace with something else?

- If the FP didn't exist and you were the education minister with a clean slate for instance, what do you personally think are the best ways to develop all children aged 3-7? What do you think the essential elements of their education should be?
 - Bonus: do you feel it's more important to develop students' social competences than to increase their academic skills?
- And what would you propose specifically to narrow gaps between learners?

Now that you have a better understanding of my research, is there anything extra you would like to add or that I should have asked but didn't, or ask me?

Thank them and ask if can contact them if there is anything I'm unsure of.

Appendix H: Information papers and consent forms for interview participants

Interview Themes

The interviews are likely to touch on the following topics:

- What the Foundation Phase looks like in practice
- Factors that influence how the policy is delivered
- Views of its strengths, weaknesses and impact
- The learning needs of pupils from deprived backgrounds

Your Participation in the Foundation Phase Practitioner Interviews

You are being invited to participate in an interview as part of a PhD candidature on the Foundation Phase. The research is supported by the Welsh Government and Economic and Social Research Council and is being conducted by Nikki Jones of Cardiff University and the Wales Institute for Social Economic Research Data and method (WISERD).

This research involves the study of the Foundation Phase from a range of angles, from the classroom, school and Regional Consortia level to national government. Interviewing Foundation Phase practitioners is a central and particularly important feature of the research. I am interested in your own engagement with, and opinions of, the Foundation Phase as a policy, and in your experiences, knowledge and understanding of key aspects of the programme. Sharing your views and experiences will be enormously valuable to this research and has the potential to help further shape the Foundation Phase in Wales.

Please note that the research **does not assess you**. Rather, it is concerned with your experiences and opinions as the school leader. Furthermore, neither you nor this school will ever be identified in any publications and all information you provide will be treated as strictly confidential and anonymous. The research is guided by a highly experienced team of experts in the field of educational research, has been approved by the Cardiff University School of Social Sciences Ethics Committee and will strictly adhere to professional codes of practice. Every care will be taken to ensure that all data pertaining to you and the school is kept securely and you have the right to withdraw from the research at any time.

I would like to ask you to confirm that you have read and understood this information by completing the consent form on the next page and forwarding it either before or at the beginning of the interview (an electronic signature is fine!). It is very probable that I would like to audio record the interview so that I can focus on what you're saying rather than writing notes. However, the recorder can be switched off at any point during the interview and if recording makes you feel at all uncomfortable then we can proceed without it from the start. You will be asked to indicate your consent to audio record the interview before we begin and can indicate your preference then. In reporting findings from my research, I may wish to use quotations from your interview, although any quotations used will maintain anonymity. The only identifiable information would be your role (i.e. Year 2 Teacher or Teaching Assistant). If you do not wish for any quotations from the interview to be used, then

please let me know. Again, I will be happy to discuss this with you prior to the interview commencing.

Please don't hesitate to contact me if there is anything you would like to clarify or discuss prior to the interview. Further information can also be found on the research project website: <u>https://5f7b79407f5e3.site123.me</u>

Nikki Jones, PhD Researcher WISERD, Cardiff University JonesnN68@Cardiff.ac.uk Telephone 07950 097503

Foundation Phase Practitioner Consent to Interview Form

I confirm that I have read and understand the 'Practitioner Interviews	
Information for Participants' and consent to be interviewed	

I consent to being audio recorded during the interview

Name	
Date	
Signature	

Appendix I: Analytical coding examples for domain construction of beneficial outcomes

The following tables illustrate how domains were derived to classify the beneficial outcomes of the Foundation Phase. Each table provides examples of how verbatim were coded in the construction of the domain categories. Beneficial outcomes are understood as something of consequential benefit to learners. Extracts represent what practitioners appear to describe as a benefit of the Foundation Phase and often what they see being developed in their learners. These beneficial outcomes are often but not exclusively articulated in relation to pupils from disadvantaged backgrounds.

Independence	the children get a lot out of it, obviously it makes them become an independent learner, it gives them the autonomy to make choices for themselves. DR
	the main strengths of course are allowing creativity and fostering independence in children's learning MBHT
	it helps them to become more independent in their learning, better at making choices MBY12
Social skills	'they need to be able to play, they need to be able to build those social skills whilst in your classroom,' HR
	'a massive amount of what we do in the first term is all personal and social development because they
	don't know how to interact with each other they don't know how to play nicely, sharing resources', MB FPLB
Speaking,	'Their language skills become greater from it' DR (strength of the FP)
Discussion,	'It is important for them to get their social language improving' HFPL impact learners from
language	disadvantaged backgrounds
	'Speech and language is a huge issue for us when they come inwe've really seen a big improvement
	FP MBFPLA)
Sharing and	'A lot of our children come into us and like I mentioned they play, their play skills are very
turn taking	underdeveloped, turn taking - very, very low' MBFPLA on how FP benefits learners from disadvantaged
	backgrounds
	It's quite nice listening to them getting on with each other you know and sharing, those kind of skills
	that they definitely needed to build HRY1 on benefits for learners from disadvantaged backgrounds
	the physical development as well because they re moving around through their play, they re active,
	' that how if he was in a normal range classroom. I would suggest he probably wouldn't get the
Physical	creative things and the chances to do the physical things as much as he does in Foundation Phase. He
development	literally can't take his own jumper off, you know? Yet with reading he's flying, you'd think he's a genius.
	but he can't take his own jumper off. He can't dress himselfSo I mean if you were in a mainstream
	Year 2 classroom and you were sitting down and working, d'you know what I mean? He wouldn't
	actually get the chances that he gets all day in Foundation Phase.' LF FPL
	'Children on the whole are probably a bit more creative in their ability'
	'they need lots of different practices in the creative areas which probably in a normal classroom they
Creativity	wouldn't be gettingit's not all about numbers and maths d'you know what I mean? It's about their
	creative side' LFPL
	'they're being creative, they're taking their learning where they want it to go.' MFPL
Collaboration	leam work, social skills' (BWY1 on how FP benefits pupils)
and teamwork	It definitely lends itself well to discussion and collaboration (CFPL on strengths)
	They can problem solve as well, it gives them these thinking skills, if they're always being told that this
Problem	is how it should be then they don't get those ideas for themselves, they don't get to make up their
solving and	own minds. It's like, oh that's how it is I'll just accept it. I think you know they need to grow as an
thinking skills	individual and I think they get to do that'. (DR on strengths)
1	

Table 1 Non-Academic Skills

	'When you think about the feedback that employers are giving and saying that children are not coming to us ready to be able to problem solve, ready to be able toactually I think the Foundation Phase allows that to instinctively happen within a classroom, so I think that is really important' MFPLA 'It really benefits some childrenyou know problem solving, thinking, rather than sitting down, teacher led, like the old curriculum' BWY1
Listening	'Their listening skills are also terrible, you know so it's increasing those listening skillsWe tend to do lots of group work, so that they're able to listen to their peers' HY1 'If we're gonna pick a group that benefit the most I would probably say it'sthose children, their communication skills are not as good, their listening skills are not as good' LFY1/2
Skill transference between subjects	'The children's ability to transfer skill are widerchildren are more confident to carry out for example, mathematics in topic based activity, which whereas before children might have mental blocks on straight mathematics and straight literacy we do find they are more confident in those elements when they are being done in a cross curricular type activity.' MBHT 'It does it help them to build links between different things as well. You might erm be learning something in I don't know a certain story or style of writing or something in maths or yeah you might be reading a book and I don't know they will just make more links themselves' MBY12

Table 2 Dispositions

Engagement, enthusiasm, enjoyment of attitudes towards learning	'You get a far better, positive attitude towards learning from disadvantaged learners' DY1Impact 'allow[s] children to increase their love of learning and I think that does foster it in its truest form at the earliest of its infancy of its days. I think that is a positive.' MBHT 'it feels like in Foundation Phase, we've kind of got them, we've kind of got them there you know, they're enjoying school, they're enjoying learning' MB FPLA You just seem to get a lot of happy children whose eyes light up at a lot of things and then they don't mind, children that erm are difficult, you know they do have not particularly wonderful things going on at home, but I don't know they just seem to have in the class, they seem to be thriving and have a reallygood benefit from it. They, they want to come into school and 'oh can I' [enthusiastically] have got things they want to go off and do' MBY12
Well-being, self-esteem, or happiness	'Itbuilds their confidence and self-esteem' (DR) 'Because of the nature of our school we need to look at the well-being of our children, because they're not ready for learning when they come into school. The reason I'm saying that is because the Foundation Phase philosophy lends itself to that well-being far more' 'I just think it has had a positive impact on all children really because children need to be happy and engaged in school from when they come in in the morning they need tonumber one they need to want to come into school and they need to be happy' DY1 'the primary focus should be their social and emotional well-being and that is the stepping stones, the foundations then to start their learningthat needs to come first before anything, before you even start, I dunno like your learning as in your more formal learning like English and maths' (CY1/2 talking about learners from disadvantaged backgrounds)
Motivation and perseverance	'It allows the children to lead their own learning and engage in things that excite them and motivate them, which I can see as a massive positive moving forward' MBHT 'We knew that it was working, and it was benefiting the children, it was you know promoting their independence and perseverance skills and everything that you want them to be in a good learner' (CFPL referring to practice when fully aligned with the policy's pedagogical and philosophical intention) 'I've seen a big change in you know the children getting motivated MBFPLA
Confidence	'It builds their confidence, greatly' DY2 'It helps them to build confidence' MBY12 'I think it helps give confidence working alongside children within their own ability/capability or within mixed groups' BWY1

Table 3 Curriculum features

	'I think they you know might not have seen a musical instrument and to have that there all the time for
	them to have a go at, it might distil a passion that they wouldn't have had an opportunity for'. (HR
	impacts on learners from disadvantaged backgrounds)
Experiential,	

resource rich learning	'It is important that they have had experience of lots of things. I think they you know might not have seen a musical instrument and to have that there all the time for them to have a go at, it might distil a passion that they wouldn't have had an opportunity for'. (HFPL impacts on learners from
	disadvantaged backgrounds) '[providing] opportunities to play, you know, opportunities to actually have the things like you know, like sand and water, they don't have sand pits, they don't have water trays, they don't have, a lot of them don't have the small world things you know, it's giving them opportunities' (HY1 impacts
Experiential, resource rich learning	learners from disadvantaged backgrounds) 'I think that they're getting a lot of experiences, like I said they need experiences in the things that we're giving them in the classroom, whether it's going outside in the eco garden and looking at your environment and life skills and talking about things' (LF FPL on impacts on learners from disadvantaged backgrounds)
Learning through play	'I definitely think the disadvantaged, [benefit] because when we look at them, lots of their parents if they have got jobs you know they are builders, they are very manual, and I think the Foundation Phase almost lends itself to that because it's very hands on, and very doing and the kids like doing those things, they think they're playing, but they've actually got structured activities that they are learning from' (DHT discussing who the Foundation Phase benefits) 'They were actually loving playing they were actually you know, some of the vocabulary and the language that was coming out of them' HY1 'I think the minute you pull them from the play the child is suddenly disengaged. But by you observing, being in the play with them, it's a spark then Nikki you know we've seen, you know the children are engaged so we're getting the learning naturally through the provisionI think that they have benefited so much from this type of play. learning through play' MBFPLA
Multiple ways to access the curriculum, choice	'They've got lots of opportunities to develop the same skills, so say for example the child might not be a keen writer or perhaps that's not the best example, but one child might not particularly favour an activity, whereas if you offered the same skill in a different activity they would engage in it, because there are so many different ways you can approach the skills so it's not, it's not a narrow, right we're learning this skill and this is how we're going to do it, that child could achieve that skill in a multitude of ways that is engaging for that child then and suits their method of learning, their preferred learning style' C2/3 'It's giving the children that choice, I think that's the most important thing, it's giving them a choice so that if they're doing a project and say I know we've just said right we're doing eisteddfod, it's daffodil, so what can you tell me, someone will want to make one out of clay, or someone will want to paint one or some might want to do some research or a poem or whatever, it's just giving them those skills so that they've got that choice' CFPL 'I think it gives children a chance to learn in an engaging environment where there's lots of different ways of teaching the child will have a chance of learning throughout different contexts so it could be provide and L think that's. I think that's the range
Small group work	is the most beneficial way of putting it really' (DY1/2 discussing main strength of the Foundation Phase) 'There's a lot to be said for these small focus groups because they do allow you the opportunity to expand with the individuals, you know because I've only got seven children sat with me for a focused task, I can afford to you know, they're all cracking on, they're all getting on with what I've explained to them now, let's sit with this one, let's sit with this little boy that hasn't got a clue what I'm on about, who doesn't even know, you know we're doing a cooking lesson, doesn't even know what a saucepan is, you know let's sit with him let's look at these things, let's take him to the role play area, let's see if we can find saucepans, let's talk about what they're for, you know so you do get that time when you're in smaller groups. I would never be able to do that in a whole class scenario. The smaller the group the more you get out of the children' (LF Y12) 'You've got a group of 10, then you can say to them oh look, you're struggling there, but really you're taking them aside to have a more, you know, a personal conversation I think it works better all round, I think you get a far closer relationship with the children' (H ALENCO) 'It's working with those small groups; it's ensuring that each child's individual needs are met within that
	group whilst their working with you.' (HY1 discussing strengths of the Foundation Phase). 'that's another thing with the Foundation Phase and deprived learners; Foundation Phase is all about outside learning so they're outside all the time in the fresh air, which is all physical so again,

Active.	Foundation Phase learning which is more active. I think suits that kind of background much better' (MB
physical.	FPLB)
outdoors	Just getting physical in any sort of lesson, so if you're counting in maths and counting back on a
	number line, trying to get them to be up and hopping or bouncing or walking backwards rather than
	sitting still with a pencil and counting back on a number line, why not get up and do it actively and I
	think boys respond to that far better I think children don't want to be sat at a desk with a pen and a
	pencil all day. I think that's you know, not going to be beneficial for any age really, but especially for
	Foundation Phase children' DY1
	'Some of the things that have come out over the last few years are children who are particularly
	talented in art, whereas perhaps that creativity and that talent wouldn't have been identified if we
	had just strictly [been] right English, maths, English, maths, English maths, so you know, the children
	have got so many different talents and I think the Foundation Phase does enable them to nurture
Subject parity	those' (CY2/3)
and	'You'll get those children who are not academically gifted and great, but they will really excel in den
importance of	building or making a fire, or you know cooking a marshmallow because you know, I think it's a leveller
creative	for all of our children' DHT
subjects	'those that perhaps can't sit and do theirtheir sums or do the writing, you know the language or the
-	social skills that they get or the creativity that they produce I think is nice because not everyone is
	academic in the sense of I'm gonna be a mathematician or a writer for things, but you might have an
	artist or somebody who's really good at drama and go down that route which I think is nice, you know
	to be able to offer those experiences as well and allow those to grow' DR
	'Getting stuck in there, getting your hands in there, investigating things, finding out, I think those
	particular children that you know you have in your head, that I've got in my head, they thrive on that
	sort of environment' (LFY12 describing positive impact for deprived learners)
Practical	'Because it's practical, it's hands on, and they're not ready for formal in year one and Year 2 even'
hands on	(BWFPL on benefits for learners from disadvantaged backgrounds)
	'It's really useful for those learners that just need to go and get things and find out about things, you
	knowit's beneficial for those children that just need to make those links, so those lower ability
	children that do just learn from just going and getting things and having a play.' MFPL
	'Stage not age is really, really appropriate I think Foundation Phase really benefits those children
	from more disadvantaged backgrounds they are learning at their own level, we're not imposing any,
	we talk about success criteria but it's their own journey and we're encouraging them to have a go,
	make mistakes, it doesn't matter, whereas perhaps erm, if it were more formal those children might be
Stage not age,	more reluctant to engage' (CY2/3)
child-led	'I think we've got those learners who haven't matured to that point yet, so it's working at the stage of
	development that they're at and they thrive with that developmental play' D2
	'The Foundation Phase and our take on it is ideally suited to children from deprived backgrounds
	because you are able to work more with the children in the moment at their level' and later 'I think the
	danger is that if you try and make it too formal and push it too early you just turn children off and they
	think they can't do it and they think, you know they start to fail before they've really started' and 'it's
	much easier for us to address their individual needs in the moment' MBFPLB

Appendix J: Likelihood of achieving outcomes in 2011/12 to 2015/16

Binary Logistic Reg	ression:	MDT 05+	MDT O6+	LLCEW O5+	LLCEW O6+	PSD O5+	PSD O6+
Valid cases		32,742	32,742	32,742	32,742	32,742	32,742
Missing Cases		9	9	9	9	9	9
Cox & Snell R Squar	e	0.176	0.105	0.208	0.133	0.142	0.152
Nagelkerke R Squar	e	0.325	0.157	0.357	0.195	0.312	0.207
Variable			-		Exp (B) (Odds Ratios)		
Constant		8.714***	0.239***	6.153***	0.312***	29.556***	0.795
Condor	Female						
Gender	Male	1.044	1.492***	0.668***	0.638***	0.541***	0.588***
Free School	not-eFSM						
Meals	FSM	0.634***	0.510***	0.573***	0.477***	0.650***	0.500***
Special No SEN							
Educational Needs Provision	SEN	0.065***	0.105***	0.066***	0.070***	0.070***	0.141***
	White British						
Ethnicity	Not White British	1.09	1.121*	1.037	1.081	0.996	0.96
% of school cohort	who are male	0.994***	0.998	0.998	1.004**	0.989***	1.003***
% of school cohort	who are eligible for	0 007***	0 001***	0 0 0 0 * * *	0 001***	1 002*	0 001***
FSM		0.987	0.991	0.989	0.331	1.005	0.331
% of school cohort with SEN provision		1.011***	1.009***	1.011***	1.013***	1.010***	1.007***
% of school cohort who are White		1 011***	1 00/2**	1 012***	1 003***	1 008***	1 004***
British		1.011	1.004	1.012	1.005	1.000	1.004
School year size		1.009***	1.003***	1.012***	1.003***	29.556***	1.002*

Estimating the likelihood of achieving each outcome in 2011/12 (Regression results)

Estimating the likelihood of achieving each outcome in 2012/13 (Reg	ression results)

Binary Logistic Re	gression:	MDT O5+	MDT O6+	LLCEW	LLCEW	PSD O5+	PSD O6+
				05+	06+		
Valid cases		33,165	33,165	33,165	33,165	33,165	33,165
Missing Cases		9	9	9	9	9	9
Cox & Snell R Squa	are	0.168	0.115	0.205	0.146	0.122	0.181
Nagelkerke R Squa	are	0.318	0.165	0.367	0.208	0.311	0.242
Variable			_	Exp (B) (Odds Ratios)			
Constant		14.100***	0.389***	12.643***	0.487***	74.972***	1.051
	Female						
Gender	Male	1.096*	1.381***	0.712***	0.645***	0.549***	0.555***
Free School	not-eFSM						
Meals	FSM	0.601***	0.541***	0.577***	0.462***	0.674***	0.523***
Special	No SEN						
Educational				0.001***	0.00.4***		
Needs Provision	SEN	0.066***	0.116***	0.061***	0.084***	0.066***	0.135***
	White British						
Ethnicity	Not White British	0.918***	1.141*	0.924	1.03	0.959	0.963
% of school cohort who are male		0.991***	0.997*	0.993***	1.001	0.991***	1.003*
% of school cohort who are eligible for FSM		0.991***	0.990***	0.988***	0.991***	0.987***	0.987***
% of school cohort with SEN provision		1.006***	1.007***	1.009***	1.008***	0.996*	1.008***
% of school cohort who are White British		1.010***	1.002	1.011***	1.004***	1.010***	1.006***
School year size		1.011***	1.004***	1.012***	1.003***	1.008***	1.003***

Estimating the likelihood of achieving each outcome in 2013/14 (Regression results)

Binary Logistic Re	gression:	MDT 05+	MDT O6+	LLCEW O5+	LLCEW O6+	PSD O5+	PSD O6+
Valid cases		33,945	33,945	33,945	33,945	33,945	33,945
Missing Cases		9	9	9	9	9	9
Cox & Snell R Squa	ire	0.172	0.118	0.195	0.151	0.113	0.199
Nagelkerke R Squa	ire	0.343	0.167	0.369	0.211	0.322	0.265
Variable			_		Exp (B) (Odds Ratios)		
Constant		17.383***	0.303***	16.901***	0.366***	88.294***	1.895***
	Female						
Gender	Male	0.956	1.300***	0.656***	0.662***	0.523***	0.537***
Free School	not-eFSM						
Meals	FSM	0.591***	0.500***	0.584***	0.474***	0.655***	0.519***
Special	No SEN						
Educational	SEN	0 050***	0 100***	0.056***	0 000***	0.050***	0 120***
Needs Provision	SEIN	0.038	0.122	0.030	0.089	0.038	0.130
	White British						
Ethnicity	Not White British	0.984	1.194***	0.974	1.140*	0.918	0.961
% of school cohort who are male		0.992***	0.999	0.994**	1.001	0.988***	1.001
% of school cohort who are eligible for FSM		0.987***	0.990***	0.985***	0.99***	0.984***	0.983***
% of school cohort with SEN provision		1.007***	1.008***	1.010***	.008***	0.998	1.009***
% of school cohort who are White British		1.010***	1.005***	1.010***	1.007***	1.013***	1.004***
School year size		1.009***	1.002***	1.010***	1.003***	1.014	1.001

Binary Logistic Re	gression:	MDT O5+	MDT O6+	LLCEW 05+	LLCEW O6+	PSD O5+	PSD O6+
Valid cases		35,553	35,553	35,553	35,553	35,553	35,553
Missing Cases		11	11	11	11	11	11
Cox & Snell R Squa	are	0.163	0.133	0.182	0.166	0.111	0.221
Nagelkerke R Squa	are	0.339	0.183	0.363	0.229	0.339	0.297
Variable			-		Exp (B) (Odds	s Ratios)	
Constant		19.441***	0.471***	21.650***	0.382***	281.335***	2.168***
Condor	Female						
Gender	Male	1.017	1.232***	0.721***	0.634***	0.539***	0.518***
Free School	School not-eFSM						
Meals	FSM	0.651***	0.488***	0.624***	0.476***	0.587***	0.509***
Special	No SEN						
Educational		0.050***	0 1 2 0 * * *	0.05.4***	0 007***	0.045***	0 100***
Needs Provision	SEN	0.056	0.120	0.054	0.087	0.045	0.123
Ethnicity	White British						
Ethnicity	Not White British	0.93	1.133*	0.935	1.176**	0.702***	0.99
% of school cohor	t who are male	0.990***	0.996**	0.989***	1.002	0.986***	0.999
% of school cohor	t who are eligible for	0 0 0 0 5 * * *	0 000***	0.005***	0 000***	0 007***	0 070***
FSM		0.965	0.966	0.985	0.988	0.987	0.978
% of school cohort with SEN provision		1.006***	1.009***	1.008***	1.008***	0.991***	1.010***
% of school cohor	t who are White British	1.013***	1.006***	1.012***	1.008***	1.011***	1.007***
School year size		1.010***	1.001	1.011***	1.002**	1.009***	1.002***

Estimating the likelihood of achieving each outcome in 2014/15 (Regression results)

Binary Logistic R	egression:	MDT 05+	MDT O6+	LLCEW O5+	LLCEW O6+	PSD O5+	PSD O6+
Valid cases		34,727	34,727	34,727	34,727	34,727	34,727
Missing Cases		7	7	7	7	7	7
Cox & Snell R Squ	lare	0.171	0.138	0.191	0.162	0.122	0.221
Nagelkerke R Squ	lare	0.361	0.189	0.378	0.222	0.357	0.298
Variable			-	Exp		Ratios)	
Constant		28.639***	0.564***	22.128***	0.621**	295.502***	3.096***** *
Condor	Female						
Gender	Male	0.919	1.293***	0.652***	0.688***	0.529***	0.533***
Free School	not-eFSM						
Meals	FSM	0.612***	0.514***	0.608***	0.509***	0.710***	0.502***
Special	No SEN						
Educational							
Needs	SEN	0.48***	0.117***	0.050***	0.089***	0.042***	0.120***
Provision							
Title as i site a	White British						
Ethnicity	Not White British	1.102	1.112*	0.986	1.115*	1.036	1.045
% of school coho	rt who are male	0.984***	0.997***	0.988***	1.001	0.977***	0.998
% of school coho	rt who are eligible for	0 080***	0 080***	0 991***	0 080***	0 982***	0 981***
FSM		0.989	0.989	0.551	0.989	0.985	0.981
% of school cohort with SEN provision		1.003*	1.006***	1.004**	1.006***	0.991***	1.007***
% of school cohort who are White		1 011***	1 00/***	1 012***	1 00/***	1 011***	1 00/***
British		1.011	1.004	1.012	1.004	1.011	1.004
School year size		1.012***	1.002**	1.013***	1.003***	1.009***	1.003***

Estimating the likelihood of achieving each outcome in 2015/16 (Regression results)

Variation is illustrated through school quartile distributions according to whether schools have low or average/high proportions of pupils eligible for FSM.

	Pro	Proportion of FSM eligible pupils within each school										
	16%+	<16%	16%+	<16%	16%+	<16%						
	ME	DT6	PSD6									
Bottom Quartile	18.4%	32.7%	15.5%	37.0%	25.0%	24.8%						
Lower Middle Quartile	32.8%	16.0%	33.7%	17.4%	32.3%	16.7%						
Upper Middle Quartile	30.3%	18.1%	28.9%	17.6%	25.9%	23.8%						
Top Quartile	18.5%	33.1%	21.9%	28.0%	16.8%	34.7%						

Distribution of schools in terms of FSM attainment (supporting Figure 4.8)

Distribution of schools in terms of not-eFSM attainment (supporting Figure 4.8)

	Pro	Proportion of FSM eligible pupils within each school										
	16%+ <16% 16%+ <16%		16%+	<16%								
	ME	DT6	LL	C6	PSD6							
Bottom Quartile	33.6%	16.5%	32.7%	16.8%	37.6%	12.6%						
Lower Middle Quartile	30.3%	17.9%	29.3%	21.2%	29.1%	21.1%						
Upper Middle Quartile	20.6%	30.1%	23.2%	27.2%	20.6%	29.0%						
Top Quartile	15.5%	35.5%	14.9%	34.9%	12.8%	37.2%						

Distribution of schools in terms of attainment gaps (supporting Figure 4.9)

		Proportion of FSM eligible pupils										
	16%+	<16%	16%+	<16%	16%+	<16%						
	ME	DT6	LL	C6	PSD6							
Bottom Quartile	-16.3%	-34.6%	-14.2%	-37.0%	-21.5%	-28.9%						
Lower Middle Quartile	-30.7%	-19.0%	-29.2%	-20.3%	-28.3%	-21.3%						
Upper Middle Quartile	-29.6%	-19.7%	-30.0%	-19.4%	-28.3%	-21.3%						
Top Quartile	-23.5%	-26.6%	-26.5%	-23.3%	-21.8%	-28.5%						

Appendix L: Relative change in school attainment gaps between $T_1 \& T_2$ for LLC & PSD³²



 $^{^{32}}$ Relative change was calculated by subtracting the T1 relative outcome differentials in each school from the T2 differentials;

			MDT	05+		LLC O5+				PSD O5+			
T:	1 Gap		T2 Gap Quartile										
Qı	uartile	4	3	2	1	4	3	2	1	4	3	2	1
4	Ν	91	64	49	64	81	60	49	73	80	58	71	64
	Row %	34%	24%	18%	24%	31%	23%	19%	28%	29%	21%	26%	23%
3	Ν	58	101	75	50	67	90	75	49	83	106	47	49
	Row %	20%	36%	26%	18%	24%	32%	27%	17%	29%	37%	17%	17%
2	Ν	52	77	93	57	55	92	88	52	53	56	88	69
	%	19%	28%	33%	20%	19%	32%	31%	18%	20%	21%	33%	26%
1	Ν	72	35	59	96	67	38	63	94	66	32	81	89
	Row %	28%	13%	23%	37%	26%	15%	24%	36%	25%	12%	30%	33%

Outcome 5+ gap quartiles for all schools nationally (supporting Figure 4.11)

1= Bottom quartile, 2= Lower middle quartile, 3= Upper middle quartile and 4= Top quartile

Outcome 6 gap quartiles for all schools nationally (supporting Figure 4.11)

			MDT	06+		LLC O6+					PSD O6+			
T	_I Gap		T2 Gap Quartile											
Qı	uartile	4	3	2	1	4	3	2	1	4	3	2	1	
4	N	107	40	48	76	135	40	49	57	89	68	48	61	
	Row %	40%	15%	18%	28%	48%	14%	17%	20%	34%	26%	18%	23%	
3	N	33	80	97	44	23	82	87	56	64	78	83	53	
	Row %	13%	32%	38%	17%	9%	33%	35%	23%	23%	28%	30%	19%	
2	N	44	82	80	75	38	88	84	70	55	88	88	53	
	%	16%	29%	29%	27%	14%	31%	30%	25%	19%	31%	31%	19%	
1	N	76	72	55	72	63	70	54	87	63	42	59	100	
	Row %	28%	26%	20%	26%	23%	26%	20%	32%	24%	16%	22%	38%	

1= Bottom quartile, 2= Lower middle quartile, 3= Upper middle quartile and 4= Top quartile

			MDT	05+		LLC 05+				PSD O5+			
T	1 Gap		T2 Gap Quartile										
Qı	uartile	4	3	2	1	4	3	2	1	4	3	2	1
4	Ν	43	38	29	21	37	31	33	24	42	44	26	28
	Row %	33%	29%	22%	16%	30%	25%	26%	19%	30%	31%	19%	20%
3	Ν	40	71	49	22	43	61	53	18	59	85	20	35
	Row %		39%	27%	12%	25%	35%	30%	10%	30%	43%	10%	18%
2	Ν	33	58	69	22	34	77	53	22	36	47	22	26
	%	18%	32%	38%	12%	18%	41%	29%	12%	28%	36%	17%	20%
1	Ν	23	16	25	23	19	20	35	22	26	28	26	31
	Row %	26%	18%	29%	26%	20%	21%	37%	23%	23%	25%	23%	28%

Outcome 5+ gap quartiles for average/high FSM schools only (supporting Figure 4.11)

1= Bottom quartile, 2= Lower middle quartile, 3= Upper middle quartile and 4= Top quartile

Outcome 6+ gap quartiles for average/high FSM schools only (supporting Figure 4.11)

			MDT	06+		LLC O6+				PSD O6+			
T:	1 Gap		T2 Gap Quartile										
Qı	uartile	4	3	2	1	4	3	2	1	4	3	2	1
4	Ν	23	11	20	21	28	16	17	17	25	30	19	22
	Row %	31%	15%	27%	28%	36%	21%	22%	22%	26%	31%	20%	23%
3	Ν	21	53	66	28	14	60	64	33	39	53	49	26
	Row %	13%	32%	39%	17%	8%	35%	37%	19%	23%	32%	29%	16%
2	Ν	18	61	57	43	11	51	60	48	32	54	53	37
	%	10%	34%	32%	24%	7%	30%	35%	28%	18%	31%	30%	21%
1	Ν	25	51	31	43	24	45	31	56	26	35	39	41
	Row %	17%	34%	21%	29%	15%	29%	20%	36%	18%	25%	28%	29%

1= Bottom quartile, 2= Lower middle quartile, 3= Upper middle quartile and 4= Top quartile

Reported engagement with the intended pedagogical principles of the Foundation Phase

Perceptions of the extent to which the principles related to the environment are embedded

Q: How many Foundation Phase learning environments in this school	All	Most	Some	Very	None
provide: -				few	
Flow between continuous, enhanced and focused activities	28%	47%	20%	4%	0.4%
Access to resources that enable choice and develop independence in					
learning	30%	49%	18%	3%	0%
Space that enables children to apply, use, consolidate and extend their					
skills across areas of learning	27%	48%	23%	3%	0%
Opportunities for children to be physically and cognitively active and have					
quiet time for contemplation and thought	19%	50%	26%	4%	0.8%

1 decimal place is provided in cells where 0% does not represent a true zero (i.e. the true value is >0 and <.05); n= 249 to 251

Perceptions of the extent to which principles related to the way practitioners work are embedded

Q: Thinking about the ways that Foundation Phase practitioners work in	All	Most	Some	Very	None
this school, how many: -				few	
Prompt the child to think and reflect, extending learning when appropriate	27%	52%	20%	1%	0%
Plan developmentally appropriate, engaging learning opportunities					
informed by regular observation and assessment of the child's abilities	31%	52%	16%	1%	0%
Actively engage parents/carers in the school community, seeing them as					
partners in their child's learning	30%	40%	26%	4%	0%
Continuously develop themselves professionally, sharing and learning from					
good practice and working with practitioners outside of the school	24%	45%	26%	5%	0%
Engage in 'Sustained Shared Thinking' with each child (working together to					
solve a problem, clarify a concept, evaluate activities or extend a narrative)	15%	44%	33%	8%	0.4%

1 decimal place is provided in cells where 0% does not represent a true zero (i.e. the true value is >0 and <.05) n=248 to 251

Expressed levels of difficulty engaging with intended pedagogies

Perceptions of how easy realising the principles related to the way children learn is in practice

Q: How easy is it to ensure that the child: -	Very	Quite	Quite	Very
	easy	easy	difficult	difficult
Exercise choice, participate, become involved, initiate and direct their own				
learning	18%	61%	21%	1%
Learn from first-hand, exploratory, practical, hands-on activities	32%	57%	11%	0.4%
Receive appropriate challenge and support from the adults and learning				
environment, to enable good progress	20%	56%	24%	1%

1 decimal place is provided in cells where 0% does not represent a true zero (i.e. the true value is >0 and <.05); n=246 to 248.

Perceptions of how easy realising the environment related principles are in practice

Q: How easy is it to ensure that all Foundation Phase learning	Very	Quite	Quite	Very
environments (including indoors and outdoors) provide: -	easy	easy	difficult	difficult
Flow between continuous, enhanced and focused activities	13%	49%	34%	5%
Access to resources that enable choice and develop independence in				
learning	14%	54%	31%	2%
Space that enables children to apply, use, consolidate and extend their				
skills across areas of learning	13%	48%	34%	5%
Opportunities for children to be physically and cognitively active and have				
quiet time for contemplation and thought	13%	49%	34%	3%

1 decimal place is provided in cells where 0% does not represent a true zero (i.e. the true value is >0 and <.05); n=246 to 248

Perceptions of how easy realising the principles related to how practitioners work are in practice

Q: How easy do you think it is for Foundation Phase in this school?	Very	Quite	Quite	Very
practitioners to : -	easy	easy	difficult	difficult
Prompt the child to think and reflect, extending learning when appropriate	20%	65%	14%	1%
Plan developmentally appropriate, engaging learning opportunities				
informed by regular observation and assessment of the child's abilities	22%	57%	20%	1%
Actively engage parents/carers in the school community, seeing them as				
partners in their child's learning	17%	50%	29%	4%
Continuously develop themselves professionally, sharing and learning from				
good practice and working with practitioners outside of the school	16%	56%	26%	1%
Engage in 'Sustained Shared Thinking' with each child (working together to				
solve a problem, clarify a concept, evaluate activities or extend a narrative)	11%	51%	35%	3%

1 decimal place is provided in cells where 0% does not represent a true zero (i.e. the true value is >0 and <.05); n=245 to 248

Appendix O: Perceptions of how easy practitioners feel it is to enact the pedagogical approach and the extent to which they are embedded within schools (Corrrelations)

Summary scores were calculated to reflect how easy practitioners felt it was to engage with the pedagogies for each of the three areas of pedagogical practice (below) and another for the extent to which these pedagogies were reportedly enacted in their schools. Scores were calculated using the Likert scale for individual pedagogies within each domain and then dividing them by the number of pedagogies within each respective area.

Correlations relating to the way children learn: r_s=.513, p<.001 based on 246 observations.

Spearman's correlations between overall score of how easy practitioners feel it is to realise the principles related to the way children learn in practice and their perceptions of the extent to which these pedagogies were embedded comprised of responses to the extent to which Foundation Phase practice focuses on the child:

- exercising choice, participating, being involved, initiating and directing their own learning over a period of time
- learning from first-hand, exploratory and practical, hands-on activities
- being appropriately challenged and supported by the adults and learning environment, so that good progress is made
- and perceived level of difficulty enacting each of these.

<u>Correlations relating to the Foundation Phase learning environment</u>: r_s=.517, p<.001 based on 247 observations.

Spearman's correlations between overall score of how easy practitioners feel it is to realise the principles related to the way children learn in practice and their perceptions of the extent to which these pedagogies were embedded comprised of responses to the extent to which the Foundation Phase learning environment:

- provides flow between continuous, enhanced and focused activities, located indoors and outdoors, that reflect and engage children's interests
- allows children access to resources that enable them to use choice and develop independence in their learning
- enables children to apply, use, consolidate and extend their skills across Areas of Learning and Experience
- includes opportunities for children to be physically and cognitively active as well as having 'quiet time' for contemplation and thought made
- and perceived level of difficulty providing this.

Correlations relating to the way that Foundation Phase practitioners work: r_s=.530, p<.001 based on 240 observations.

Spearman's correlations between overall score of how easy practitioners feel it is to realise the principles related to the way children learn in practice and their perceptions of the extent to which these pedagogies were embedded comprised of responses to the extent to which Foundation Phase practitioners:

- prompt the child to think about and reflect upon their learning experiences in order to extend their learning when appropriate
- plan developmentally appropriate, engaging learning opportunities informed by regular observation and assessment of children's abilities
- actively engage parents/carers in the setting/school community, seeing them as partners in their children's learning
- look to continuously develop themselves professionally, sharing and learning from excellent and effective practice and working with other practitioners across Wales and further afield.
- and perceived level of difficulty enacting each of these principles.

Appendix P: Impact of educational policies and directives (non-collapsed survey data)

Q: What kind of impact, if any, do you feel	Very	Slightly	No	Slightly	Very
the following have had on how the	negative	negative	impact	positive	positive
Foundation Phase is implemented in this					
school?					
National tests	52%	29%	2%	6%	1%
Literacy and Numeracy Framework	2%	14%	17%	37%	30%
Digital Competency Framework	1%	12%	13%	49%	26%
Foundation Phase Action Plan	1%	2%	29%	50%	19%
Foundation Phase Action Profile	4%	8%	21%	43%	25%
End of year Teacher Assessments	9%	25%	20%	31%	15%
Categorisation	26%	20%	34%	14%	6%
ESTYN Inspection Framework	11%	19%	32%	31%	7%
Regional Consortia Challenge Advisor	5%	13%	35%	31%	16%

n= 242 to 247

Appendix Q: Cohort characteristics and attainment profiles of case study schools

Table Key: T_1Q = Time 1 Quartile; T_2Q = Time 2 Quartile; Q1= Bottom quartile, Q2= Lowermiddle quartile, Q3= Upper middle quartile and QT4= Top quartile.

Bracken Way	T.	T ₂	Outcome	eF	SM Att	ainmei	nt	All P	upils	Not-	eFSM A	Attainm	nent	Ga	ps
Way	'1	12	Outcome	T_1	T_2	T_1Q	T_2Q	T_1	T_2	T_1	T_2	T_1Q	T_2Q	T_1Q	T_2Q
Avg Y2 size	32	27	MDT5+	85%	85%	3	З	81%	89%	79%	91%	1	2	4	3
% Male	47%	54%	MDT6+	32%	33%	4	4	22%	32%	16%	31%	1	1	4	4
% eFSM	35%	33%	LLC5+	85%	82%	3	2	81%	88%	79%	91%	1	2	4	2
% SEN	55%	59%	LLC6+	32%	30%	4	4	28%	32%	25%	33%	2	2	4	4
FP Score Rar	nk		PSD5+	85%	93%	2	2	91%	94%	94%	95%	2	2	2	2
out of 36		30	PSD6+	41%	37%	4	3	44%	52%	46%	60%	2	2	4	2

Cohort characteristics and attainment profile of **Bracken Way Primary**

Cohort characteristics and attainment profile of Cartref Primary

Cartref	T ₁	Ta	C	Outcome	eF	SM Att	ainme	nt	All P	upils	Not-	eFSM A	Attainm	nent	Ga	ips
curtici	11	12		outcome	T_1	T_2	T_1Q	T_2Q	T_1	T_2	T_1	T_2	T_1Q	T_2Q	T_1Q	T_2Q
Avg Y2 size	43	49		MDT5+	67%	84%	1	2	81%	88%	86%	91%	1	2	2	3
% Male	48%	47%		MDT6+	9%	26%	2	3	22%	27%	14%	28%	1	1	3	4
% eFSM	42%	34%		LLC5+	56%	82%	1	3	81%	85%	82%	87%	1	1	1	3
% SEN	72%	45%		LLC6+	7%	24%	2	3	28%	27%	20%	28%	1	1	2	4
FP Score Rar	nk			PSD5+	85%	96%	2	3	91%	98%	94%	99%	2	3	2	2
out of 36		4		PSD6+	6%	48%	1	3	44%	52%	11%	55%	1	2	2	4

Cohort characteristics and attainment profile of Heathbrook Primary

Heathbrook	T ₁	T ₂	Outcome	eF	SM Att	ainmei	nt	All P	upils	Not-	eFSM A	Attainm	nent	Ga	ips
Heathbrook	•1	12	outcome	T_1	T_2	T_1Q	T_2Q	T_1	T_2	T_1	T_2	T_1Q	T_2Q	T_1Q	T_2Q
Avg Y2 size	29	30	MDT5+	78%	88%	2	3	78%	88%	82%	88%	1	1	3	3
% Male	51%	48%	MDT6+	11%	8%	2	2	12%	26%	20%	32%	2	2	3	2
% eFSM	43%	27%	LLC5+	62%	88%	1	3	71%	91%	80%	92%	2	2	2	3
% SEN	33%	29%	LLC6+	11%	17%	2	2	15%	26%	24%	29%	2	1	3	3
FP Score Ran	k		PSD5+	76%	88%	1	2	90%	93%	86%	95%	1	2	2	1
out of 36		21	PSD6+	24%	33%	2	2	8%	45%	38%	49%	2	1	3	3

Cohort	characteristics	and	attainment	profile	of D	alestowe	Primarv
conort	characteristics	unu	attannitticitt	projiic	$v_j \boldsymbol{\nu}_i$		

Dalestowe	T ₁	Ta	Outcome	el	SM Atta	ainmer	nt	All P	upils	Not-	eFSM A	Attainn	nent	Ga	aps
Dalestowe	11	12	Outcome	T_1	T_2	T_1Q	T_2Q	T_1	T_2	T_1	T_2	T_1Q	T_2Q	T_1Q	T_2Q
Avg Y2 size	29	18	MDT5+	93%	84%	4	3	94%	89%	95%	93%	4	2	3	2
% Male	0.4	0.5	MDT6+	16%	42%	3	4	14%	35%	12%	29%	1	1	4	4
% eFSM	50%	48%	LLC5+	93%	81%	4	2	92%	81%	90%	82%	3	1	4	3
% SEN	15%	26%	LLC6+	16%	42%	3	4	20%	39%	23%	36%	1	2	3	4
FP Score Ra	nk		PSD5+	98%	100%	3	4	95%	98%	93%	96%	2	2	4	4
out of 36		17	PSD6+	23%	54%	2	4	23%	50%	23%	46%	1	1	4	4

Table Key: T_1Q = Time 1 Quartile; T_2Q = Time 2 Quartile; Q1= Bottom quartile, Q2= Lower middle quartile, Q3= Upper middle quartile and QT4= Top quartile.

Cohort characteristics and attainment profile of Maes Bach Primary

Maes Bach T_1	T1	Ta	Outo	ome	eF	SM Att	ainme	nt	All P	upils	Not-	eFSM A	Attainm	nent	Ga	ips
Macs Bach	'1	12	oute	Joine	T_1	T_2	T_1Q	T_2Q	T_1	T_2	T_1	T_2	T_1Q	T_2Q	T_1Q	T_2Q
Avg Y2 size	15	14	MD	T5+	83%	71%	3	1	77%	79%	71%	82%	1	1	4	2
% Male	66%	50%	MD	T6+	4%	14%	2	2	11%	29%	19%	36%	1	2	2	2
% eFSM	52%	34%	LLC	25+	83%	64%	3	1	73%	76%	62%	82%	1	1	4	1
% SEN	48%	45%	LLC	26+	13%	7%	3	2	14%	21%	14%	29%	1	1	4	2
FP Score Rar	nk		PSI	05+	87%	64%	2	1	82%	79%	76%	86%	1	1	4	1
out of 36		7	PSI	06+	35%	14%	3	1	32%	31%	29%	39%	1	1	4	1

Cohort characteristics and attainment profile of Llanover Fawr

Llanover	T ₁	Ta	Outcome	eF	SM Att	ainme	nt	All P	upils	Not-	eFSM A	Attainn	nent	Ga	aps
Fawr	• 1	12	outcome	T_1	T_2	T_1Q	T_2Q	T_1	T_2	T_1	T_2	T_1Q	T_2Q	T_1Q	T_2Q
Avg Y2 size	27	27	MDT5+	65%	90%	1	3	83%	90%	88%	90%	2	2	2	3
% Male	50%	49%	MDT6+	6%	18%	2	3	13%	44%	15%	53%	1	4	2	2
% eFSM	21%	27%	LLC5+	53%	95%	1	4	80%	90%	88%	88%	2	2	1	4
% SEN	23%	28%	LLC6+	18%	18%	3	2	33%	38%	37%	48%	3	4	3	2
FP Score Rai	nk		PSD5+	77%	95%	1	4	87%	98%	89%	97%	1	2	1	4
out of 36		27	PSD6+	12%	9%	2	2	49%	56%	59%	63%	3	2	2	2

Cohort characteristics and attainment profile of case study school **Maycroft**

Maycroft	Maycroft T_1 T_2	Outcome	ef	SM Atta	ainmen	t	All F	Pupils	Not	-eFSM A	ttainm	ent	Ga	aps	
wayeron	. 1	12	outcome	T_1	T_2	T_1Q	T_2Q	T_1	T_2	T_1	T_2	T_1Q	T_2Q	T_1Q	T_2Q
Avg Y2 size	49	58	MDT5+	95%	86%	4	3	94%	98%	94%	99%	3	4	4	2
% Male	48%	50%	MDT6+	26%	21%	4	3	32%	39%	33%	41%	3	3	4	3
% eFSM	12%	8%	LLC5+	89%	79%	4	2	93%	97%	94%	98%	3	4	3	2
% SEN	12%	8%	LLC6+	42%	36%	4	4	39%	46%	39%	47%	3	3	4	4
FP Score	Rank		PSD5+	96%	100%	3	4	97%	100%	98%	100%	3	4	3	3
out of 36		36	PSD6+	58%	57%	4	4	66%	85%	67%	87%	4	4	4	3