Why would schools choose to have two-year-olds?

An exploration of 'quality' from a complexity viewpoint.

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Abstract

It is widely accepted that 'quality' is both a necessary attribute in the provision of early childhood education (ECE) and that it is also an extremely difficult concept to define. Multiple meanings co-exist within individual organisations and the wider education system. Building on the work of Edgar Morin, the French philosopher and sociologist, this study uses critical complexity theory as both a theoretical and methodological framework to explore how quality is being conceptualised in relation to the policy of schools offering Free Early Learning (FEL) places for two-year-olds. The thesis offers a case-study of four schools within one English local authority when they were just starting to offer two-year-old FEL places in Summer 2014. The research does not attempt to arbitrate over what is considered to be 'quality' provision or practice for two-year-olds. Instead it considers how current understandings of quality for two-year-olds in schools have evolved over time and how ideas about quality originating in the business sector appear to have informed practices such as early intervention strategies and the measurement of children's academic outcomes. The argument is made that because of the impact of high-stakes accountability measures there is a danger that manufacturing or production-based understandings of quality become the norm and that other important understandings of quality are marginalised or lost. Suggestions are made about where future attention could be focused by those in leadership or advisory roles to redress the balance in how quality is perceived in schools.

Contents

Glossary of terms

CPU	Child Poverty Unit
CT	Complexity Theory
DCSF	Department for Children, Schools and Families
DfE	Department for Education
DoH	Department of Health
DWP	Department for Work and Pensions
ECE	Early Childhood Education
EPPE	Effective Practice in Preschool Education
EPPSE	Effective Pre-school, Primary and Secondary Education
EYFS	Early Years Foundation Stage
EYFSP	Early Years Foundation Stage Profile
HLE	Home learning environment
HMG	HM Government
HMT	HM Treasury
IDACI	Income deprivation affecting children index
FEL	Free Early Learning
FSM	Free School Meals
LA	Local Authority
OECD	Organisation for Economic Co-operation and Development
OFSTED	Office for Standards in Education
PSED	Personal, social and emotional development
PV	Private and Voluntary
SENCO	Special Education Needs Coordinator
SEND	Special Educational Needs and Disabilities
SPC	Statistical Process Control

Chapter One - Introduction

This thesis is based on research carried out in Summer 2014 when some schools in my local authority (LA) were just starting to offer Free Early Learning (FEL) places to two-year-olds who met the funding criteria to be classed as "disadvantaged" (HM Government [HMG], 2013, p. 40). I will explain and interrogate the two-year-old FEL initiative, including the notion of disadvantage, in more detail in later chapters. However, in this introductory chapter I wish to highlight the main themes within the thesis. As implementation of the initiative was, and remains, an entirely optional activity for schools, it begs the question: Why would a school choose to have two-year-olds? This question is the central problem of the thesis where I explore how the purpose of education is being conceptualised, how these particular two-year-olds and their families are being situated and how such thinking might be impacting on practice and provision for two-year-olds in schools.

1.1 Why this research interest?

In the late 1990s I opened my own private nursery. I was an experienced primary school teacher but a completely inexperienced business owner and manager. In order to develop my management skills and grow the business, I attended courses and read a variety of general leadership and management materials that were recommended to me. At that particular time I gravitated towards business management and not early childhood education (ECE) literature because the knowledge I was seeking was to do with employing people, developing effective teams and building a customer base. Such knowledge could be applied to a wide range of organisations and was not education specific. However, I was disappointed to find that much of the advice came from what I now recognise as a positivist stance, advocating a 'do this and your staff will do that' approach using a linear logic. My life experience told me that change did not happen like that and what worked once may not work a second time or in different circumstances. It was at this time I heard about complexity theory (CT) and it resonated with my experience.

Complexity theory makes sense to me because, rather than adopting a linear logic, I see the world as being shaped by connections and choices made within richly networked environments. I believe that when we, as individuals or groups within our social system, consciously or unconsciously make one connection or take one path over another it can expand and/or limit possible outcomes. This process is known as "bifurcation" (Capra, 2005, p. 37) or 'emergence' (Holland, 1998) and is a central concept within complexity theory. Even very small differences in or between systems can produce very different outcomes. From this I infer that when changes are introduced to systems such as schools it would be extremely difficult to predict the impact.

My studies also led me to find out how quality is variously defined in the business management sector and that has helped me to consider the many ways that quality is being defined in education and the ECE sector specifically. In this thesis I explore how ideas about quality have changed over time within the business sector and the corresponding developments in ideas about quality in the education sector. As the basis for this comparison I use Garvin's (1984) categories of quality that he identified in academic literature relating to the business sector and to which I add a further category of 'disruptive innovation' (Christensen, 1997). Some of the ideas that were raised in the business management literature in relation to quality as a means of improving performance and profitability, such as statistical process control (SPC), could possibly be deemed appropriate for aspects of educational organisations such as the office-based administration functions of schools. However, what sits uneasily for me is the way that those same ideas are being applied to the education function of schools. I now work for a local authority and no longer own a nursery but that early unease about positivist approaches to the leadership and management of staff and of children's educational outcomes remains with me. I recognise that this unease about the intrusion of business and management principles into educational settings is broadly felt and has been much written about (Ball, 2016; Moss, 2014; Junemann & Ball, 2013).

I was attracted to the EdD because it is aimed at people who are currently practising within the field of education and is offered as a means of

supporting practitioners to "articulate and critically interrogate their own professional knowledges" (Thomson, 2017, para. 5). I have found the process to be an iterative one; returning repeatedly to what initially appeared to be straightforward concepts within my professional role and finding much more complexity in practices that I had originally taken for granted. The main difficulty in being able to critically interrogate my own situation lies in the very fact that I am part of the system and have been influenced, perhaps even formed, by that system. In fact Morin (1999) talks about us being possessed by our environments and education. This, he claims, can lead to a rigid rather than a flexible style of thinking where dichotomous explanations are prevalent and anything that does not align with prior learning may be categorised as incorrect. To overcome this tendency Morin advocates that researchers attempt a "disinterested understanding" (p. 52). This means that as I explore how and why quality is being presented across the education sector in the way that it is, I should not dismiss anything out of hand and, at the same time, should not expect to agree with everything I find. Morin also advocates a form of reflective practice where researchers stand back from the situation being studied to attempt a "meta-point of view" (Morin, 2008, pp. 50-51). In doing so, researchers must acknowledge their own part in, or impact on the system being studied and therefore must recognise that their observations can never be truly objective.

Heeding Morin's advice, before I attempt to take a meta-view of the schools, LA and wider English education system in this study, it is important that I consider how I am impacted by and how I might be influencing the system. I think it is worth introducing my job title here as it brings context to the study and also demonstrates how much my role is entangled within the Department for Education (DfE) agenda. My official job title is 'Early Years Foundation Stage Quality, Access and Moderation Officer'. The meaning of the first four words are relatively unambiguous; I work in the Early Years Foundation Stage (EYFS) which in the English education system refers to the education of children from birth to the age of five, the statutory school starting age. I work specifically in the school sector where a policy change introduced in 2013 (DfE, 2013b) has resulted in an increasing number of

children attending school provision from the age of two. The meaning of the last word, *Officer,* indicates that I am working on behalf of the LA which has the effect of separating the work I do from that of the many independent consultants now working in the field. It is the three terms in the middle of the job title that I believe to be more contentious. Yet these terms and the technologies related to them which I describe below are so commonplace and taken-for-granted that they are now viewed as unremarkable.

There appears to be a shared sense within the education community that schools need to aspire to *quality.* The *access* part of the title refers to notions of inclusion and equity, particularly in terms of children with special educational needs and disabilities (SEND) and 'disadvantaged' children, seeking to ensure that all children are able to 'reach their potential'. This particular issue has been referred to in a range of government publications during the period of two-year-old FEL policy implementation (DfE, 2018a; Ofsted, 2015b; HMG, 2014; Department of Education and Department of Health [DfE & DoH], 2011; Gibb et al., 2011; HMG, 2011a). In relation to 'disadvantaged' children the word 'access' in my job title also refers to the notion of social mobility (Ofsted, 2016b; HMG, 2012; HMG, 2011b). The term *moderation* refers to the statutory part of my role; the process of ensuring that assessments made by teachers to track children's attainment and progress are accurate and therefore produce reliable and valid data. The three concepts are interrelated. For example, a significant element of the way quality is currently understood in education involves data production as a major part of accountability practices and includes outcome measures for 'disadvantaged' children – including the two-year-olds who are eligible for FEL places.

Since the early 1980s there has been a strong shift towards accountability in public services entailing a heavy reliance on data production (Gilbert, 2012; Ozga, 2009; Ranson, 2003). The perceived need to produce data has grown exponentially alongside technical developments in data management (Lawn, 2011). More recent education policy has seen a shift from governance towards the encouragement of more self-governing behaviour where increased freedoms are balanced with greater 'intelligent' accountability

(Gibb, 2017; DfE, 2010b). An argument against the excessive production and use of data (e.g. Bradbury & Robert-Holmes, 2016) is that accountability measures are driving the production of particular forms of data, sometimes motivated by fear (Biesta, 2015; Ball, 2003), thereby encouraging or prioritising specific activities (Robert-Holmes, 2015). Therefore it could be argued that what appears to be a decentralised education system is in fact an illusion as it is still being strongly steered by central government policy (Ozga, 2009).

There is already a large and growing literature on the impact of measurement and accountability practices in education on teacher/leader attitudes and behaviours and the potential negative consequences for children and adults (Jones et al., 2017; Robert-Holmes & Bradbury, 2016; Ball, 2015; Hutchings, 2015; Ball, 2003). I witness some of this negative impact in my daily work with schools and it is one of the reasons I was motivated to undertake the EdD. Nevertheless, I also recognise that despite the good relationships I have with the many EYFS practitioners in the LA, and however thoughtful I might hope to be in carrying out my role, I am also part of the problem. In my capacity as an LA officer, I am an agent of the DfE's relentless drive to improve results and am thoroughly implicated in what might be described as the Government's enterprise of educational accountability through what I am terming a production-based understanding of quality.

1.2 The problem with quality

The following quote from the Coalition Government document *More Affordable Childcare* indicates how 'quality' is framed as an essential term in relation to the education of two-year-olds. The quote sets the scene for my thesis in which I explore the use of the term 'quality' and its potential impact on the people involved in delivering or receiving services within the education sector.

> We know that the quality of provision is particularly important for disadvantaged children. **Our new guidance on early education therefore sets out the expectation that local authorities should**

only fund early learning places for two-year-olds in settings judged to be 'good' or 'outstanding'
(HMG, 2013, p. 30 original emphasis).

This statement raises many questions for me, including: What is meant by the term 'quality' in this context? What constitutes 'good' and 'outstanding' quality for two-year-olds? What aspects of the provision are 'particularly important for disadvantaged children'? How are decisions made about quality? And, moreover, who gets to decide?

Quality is a word that is to be seen and heard in a great many contexts on a daily basis, for example, in advertisements and in everyday social conversations as well as in workplace settings and organisational literature (Dahlberg, Moss & Pence, 1999). Therefore, it is not surprising that the term is used liberally within the education sector, and the ECE part of that sector is no exception. With particular relevance to two-year-olds, the document *More Great Childcare* (DfE, 2013b) that introduced a debate on relaxing staff-child ratios when working with two-year-olds, used the term 'quality' 137 times in 46 pages; an average of almost three times per page. This is not unusual. Other examples related to the two-year-old FEL initiative are the *Early Education Pilot for Two Year Old Children Evaluation* (Smith et al., 2009) that refers to quality 225 times in 168 pages and *The Early Education Pilot for Two Year Old Children: Age Five Follow-up Research report* (Maisey, Speight, Marsh & Philo, 2013) using the term 89 times in 43 pages.

'Quality' is frequently used as a relative term ('low quality', 'high quality', 'good quality') or alongside another word ('quality assessments', 'childcare quality' and 'setting quality') in a way that assumes broad agreement about what it means. Whyte (2003, p. 61) refers to terms such as quality as "hooray words", meaning that they are frequently used to suggest positive messages but are simultaneously vague and undefined. This implies that when such a term is used frequently it can engender a sense of familiarity that promotes a feeling of 'common-sense' and perhaps discourages interrogation of the concept.

Clarke (2014) refers to terms such as quality and equity used in relation to education as "sublime" concepts because they are positioned as highly

desirable and yet difficult to achieve. The very fact that the terminology is vague enables definitions to continuously change which, Clarke argues, makes achieving quality goals harder. He further argues that the goals of quality and equity are also readily assumed because it would appear unreasonable to object to the idea of 'quality education' or deny equity of access to such quality for 'disadvantaged' children. Here, there is a danger that such easily adopted ideas lead on to the processes used to measure quality (such as assessment of levels of child development) becoming what Crossouard (2012, p.187) calls "a wholly unexceptional, taken-for-granted practice" that masks the values and assumptions underpinning those processes. Further, the measures themselves can change the nature of education practices (Robert-Holmes & Bradbury, 2016). I will return to these problems in greater detail in Chapter Four.

1.3 The research questions

The goal of my research is to explore some of the different understandings of quality relating to ECE for two-year-olds. However, I do not want the research to simply address the question: What are the different viewpoints about quality for two-year-olds? Nor do I want a project that might subsequently attempt to arbitrate over what quality ECE looks like. Neither of these outcomes would sit comfortably with my understanding of a critical complexity point of view that I discuss further in Chapter Two. Instead, I aim to say something about 'why' and 'how' understandings of quality have become established, which to borrow Byrne's terminology (2005, pp. 97-98) is a "project of establishing how things have come to be as they are". This kind of approach does not avoid taking a critical stance in relation to the quality discourse, but it does avoid constructing its arguments against an explicit norm, or conception of quality.

From a complex, networked view of the world, I would expect there to be some impact of what I am calling the business management view of quality on the views of practitioners working in schools. I believe that my enquiry is important because I think that there is a danger of a manufacturing or

production-based understanding of quality becoming the dominant understanding in ECE.

Below are my research questions; the main question in bold, followed by my field questions:

How is 'quality' understood in terms of provision for two-year-olds in English schools and how as a society did we arrive at these understandings?

a) Have current business models of management and quality improvement had an impact on how quality is perceived by practitioners working in schools offering two-year-old FEL places?

b) What messages have recent Labour, Coalition and Conservative governments and their regulatory body, Ofsted, given about quality in education with particular reference to two-year-olds eligible for FEL places?

c) What do professionals working in English schools consider to be the most important aspects of quality in provision for two-year-olds?

d) To what extent do current assessment and accountability practices in ECE influence perceptions of quality in schools?

It is worth noting here that the title of the thesis is different to any of the research questions. The main reason for this is because as the study progressed, complexity became an integral part of the methodology and therefore it was important to highlight this fact as early as possible to any potential reader. Together the title and the abstract serve to warn the reader at a very early stage not to expect a conventional thesis on the subject of quality and not to expect any definitive statements about what is and what is not quality. I trust that the title also suggests that reasons for providing two-year-old FEL places are linked to ideas about quality and that both the reasons and the ideas about quality are complex.

1.4 Organisation of the thesis

A critical complexity framework is used to construct the methodology of the study. In Chapter Two I explore the different ways that complexity is

understood in order to provide a theoretical framework through which to read and understand this thesis before explaining how I have developed my critical complexity methodology in Chapter Three. The methodology is based on the work of Edgar Morin (2008), the French philosopher and sociologist, who is considered to be one of the most influential writers on complexity.

In Chapter Three I explain why, when using a critical complexity methodology, it is considered important to explore the history of a system in order to understand a present situation. I therefore present my interpretation of this history in two parts after the methodology chapter, arguing that Chapters Four and Five fulfil the dual functions of literature review and findings chapters. It is because they are critical to answering my research question about how as a society we arrived at the point where quality is understood in the multi-layered way that it is, that I have devoted much more space to these histories than might ordinarily be expected. In Chapter Four: Quality, I use my interpretation of Morin's dialogic method (see 2.5.1) to investigate how different understandings of quality originating in the business sector have influenced management of the education sector. In Chapter Five I share my interpretation of the background to the two-year-old FEL initiative and draw out the themes of poverty, school readiness, the role of parents and social mobility.

In Chapters Six and Seven I provide comparative examples drawn from interviews undertaken in four purposefully selected case schools. In Chapter Eight I raise the issue that I, and others in roles similar to mine, need to seek opportunities to engage with practitioners in schools to think about how quality is being conceptualised for two-year-olds and their families and to challenge some of the taken-for-granted assumptions that seem to have resulted from the prevalent production-based messages about quality. I argue that the problems I identify in this study of the two-year-old FEL initiative could well be symptomatic of a broader trend in education. In the next chapter I share my interpretation of complexity theory and particularly that of critical complexity in order to provide a theoretical framework through which to read and interpret this thesis.

Chapter Two - Complexity

In the previous chapter I described how I came to take notice of complexity theory as a result of finding the positivist approaches to leadership and management inadequate for how I perceived the world to be. What I did not realise at the time was that, like the term quality, there are also many ways to understand complexity. The subtle difference being that quality is often used in a vague, imprecise way and can change meaning depending on the context in which it is being used, whereas complexity, as an analytical term in research, depends on the ontological and epistemological position of the researcher.

Discussing complexity theory (CT) may sound very abstract, but as the chapter unfolds I hope it will become clear how it can provide a useful framework for thinking about the education sector, how it self-organises and how it is managed. At the beginning of this chapter I briefly explore the history and some of the key concepts associated with complexity theory originating from different understandings of systems. I introduce two competing interpretations of CT that I refer to as 'complexity science' and 'critical complexity'. I then explore the concept of complex adaptive systems as it applies to education and draw on the work of other academics using a CT lens. Finally I consider how a theory of critical complexity can be used to inform research methodology.

2.1 From systems theory to critical complexity

Complexity theory has its origins in systems theory which involves studying the behaviour of systems such as eco-systems, mechanical or social systems. Complexity theory is essentially concerned with the complexity present in open systems which, in the case of my research, are social systems; namely schools and the wider education system in England. Following the Second World War systems theories were developed across a large number of mathematical and scientific fields of study. In an effort to draw ideas together and work towards a common understanding, von Bertalanffy (1968) developed a general systems theory that he claimed could

also be used in social sciences. What started as a way of understanding phenomena in the natural sciences and mathematics was subsequently used as a framework, or metaphor, for understanding biological and then human systems. Luhmann, the German sociologist and philosopher of science who developed a general social systems theory, describes systems theory as a "supertheory" (1984/1995, p. 5), meaning that it can be applied in multiple social contexts. However, he makes the point that this supertheory is then used by different traditions in different ways. He uses the term "guiding differences" (Luhmann, 1984/1995, p. 4) which he explains "are distinctions that steer the theory's possibilities of processing information".

In the field of education research Morrison (2008) describes in a highly schematic way, how linear-thinking developed into complexity theory and then moved on to chaos theory. Alhadeff-Jones provides a very different view of its development when he claims that there are multiple interpretations of CT because:

> heterogeneity of meaning and the multiplicity of definitions, trends and fields of study in which they have taken their roots illuminate the constitutive disorder that shaped their evolution.
> (2008, p. 76)

I take this to mean that the process by which complexity theory developed was far from linear and is still evolving. I understand the process as multiple developments and layered interpretations of CT (and other theories, including some also developed from systems theory) co-existing and potentially influencing each other.

There are two dominant approaches to CT that might be separated according to their different ontological and epistemological positions: 'complexity science' and 'critical complexity'.   Following the argument put forward by Alhadeff-Jones above, I recognise that although they are presented here for convenience as two opposing approaches, within each one there will be overlapping and nuanced interpretations. The co-existence of multiple interpretations has produced a situation where many researchers claim that there is now common usage of the term 'complexity' without there being a common understanding (Beabout, 2012; Cilliers, 2010; Alhadeff-

Jones, 2008; Kuhn, 2008; Byrne, 2005) or without there being a common approach to using complexity in education research (Ricca, 2015; Hetherington, 2013; Davis, 2008). Therefore it is important that I clarify my understanding of the term and how I will be using critical complexity both as a theoretical framework and to inform the methodology I develop.

The term 'critical complexity' was coined by Cilliers, Professor of Complexity and Philosophy at Stellenbosch University, South Africa, (2010, p. viii) to highlight the importance of reflexivity and the role played by epistemological and ontological beliefs within the research process. Critical complexity comes from a non-positivist standpoint and unlike complexity science, it emphasises the limited and contingent nature of knowledge. It positions the researcher as part of the system with a view that is partial and subject to change. In UK and US education research communities, the use of complexity theory in general (Gough, 2012) and the tradition of critical complexity specifically is relatively unknown, but through the work of Morin it is much more widely accepted particularly in Europe and parts of Latin-America. (For a discussion of how this situation may have arisen, see Montuori, 2008, p. xiv). In English speaking countries there tends to be a strongly scientific emphasis to the interpretation and use of CT (Alhadeff-Jones, 2008), and in Chapter Four I discuss how I believe this 'complexity science' approach has influenced some politicians and recent educational policy in England.

It has been argued that complexity theory provides an ideal means of studying education because the education sector and the process of education are in themselves complex (Khattar & Hunsberger, 2015; Davis, 2008; Davis & Sumara, 2008). In my review of the literature, there were two broad trends in the way complexity was being used to theorise education. The first group were advocating the use of complexity as a theoretical framework for educational research in general. They explained the concepts, discussed the similarities and links between education and complexity (Davis, 2008) and highlighted complexity theory's usefulness, for example, because of its focus on the role of context and the importance of considering the research subject in its unique environment (Haggis, 2008).

The second group advocated complexity as a theoretical framework through which to view specific aspects of education such as educational change processes (Trombly, 2014; Bates, 2013; Beabout, 2012) or the process of learning (Jorg, 2017; Wetzels, Steenberg & Van Geert, 2016; Osberg, Biesta & Cilliers, 2008). In relation to ECE I found two researchers, Pronin-Fromberg (2017) who used the concept of emergence to theorise learning in ECE contexts, and Evans (2015) who used emergence to theorise a different concept of school-readiness to the dominant discourse promoted in the English ECE context. Like the researchers I have identified in this paragraph, I intend to use complexity as a theoretical framework through which to explore my research question - how in the English education system different understandings of quality have been reached in relation to the education of two-year-old children. As such I perceive my study as contributing to the body of research using complexity to theorise education at system level rather than at the level of the individual learner.

According to Khattar and Hunsberger (2015, p. 2) "investigations of early childhood education both invite and require complexity", meaning that there is complexity in the many ways that ECE can be enacted and interpreted and therefore any study of ECE needs to take such complexity into account. In order to achieve synergy between the theoretical lens I use to view my research subject and the research process itself, I made the decision to also use a complexity informed methodology. Here, in the English speaking context, I appear to be in a small minority of researchers making use of CT to inform the methodological approach of the study. In fact I have only found two studies (Wetzels et al., 2016; Hetherington, 2013) explicitly using CT methodologically in educational research. What follows in this chapter is an explanation of my understanding of critical complexity in order to clarify the theoretical framework I am using for both purposes.

From the many definitions of complexity theory, the social scientist David Byrne provides the one that I feel gives the most succint description according to my understanding of the term. He claims that CT is the "interdisciplinary understanding of reality as composed of complex open systems with emergent properties and transformational potential" (2005, p.

97). In the next section I explore the concept of an educational system through Byrne's three terms: complex open systems, emergence, and transformational potential.

2.2 Complex open systems

The first concept within Byrne's definition is that of "complex open systems" (2005, p. 97). Schools can be understood as examples of complex open systems because they have many connections with other parts of their immediate systems and potentially beyond. In turn, those connections can be said to have further connections and so on. Schools are, for example, 'open' to the influence of ideas (including pressures or expectations) from outside the school community. These ideas could come via the various people within the school system (who could be considered as systems in their own right) and their individual connections to other systems, for example through experiences of other workplaces, life experiences, values and beliefs. A school organisation could be influenced through connections to other external systems; for example, communities and governance/accountability structures. Influences and ideas also transfer from the school to that which is outside its system.

To begin to understand a complex system, the constituent parts need to be recognised within the whole system and the whole system recognised within its wider environment. These parts and wholes cannot be understood in isolation; rather they are understood as in multiple and sometimes antagonistic relationships with each other (Morin, 2006). A school system could be simplified by separating it into its constituent components - for example, structural aspects of the system such as the curriculum and administrative systems. However it is important to note that the act of separating components of a system in order to understand it does not mean that the interactions between parts of systems or the context of the system should be forgotten.

2.3 Emergence

The second concept within Byrne's definition of complexity theory is that of systems having "emergent properties" (2005, p. 97). A popular saying attributed to Aristotle that describes the outcome of emergent behaviour is, 'the whole is greater than the sum of the parts'. Emergent behaviours (the development of new properties that are more than the properties of the constituent parts of the system) occur at points where the unique components within a system meet - where the development or trajectory of the system could take different paths. These interactions in the system are known as points of bifurcation:

> At the bifurcation point, the system can 'choose' – the term is used metaphorically – between several possible paths, or states. Which path will depend on the system's history and on various external conditions and can never be predicted.
> (Capra, 1997, p. 177)

Non-linearity occurs in the system and paths are unpredictable because of the abundance of 'choice' provided by the many connections found at points of bifurcation. The more richly connected and open the system, the more choices are available and the more unpredictable outcomes would be. Therefore the unique context of the system is important and needs to be considered in temporal as well as in spatial terms. For example, given identical options, the same school system might behave differently at different points in time (perhaps because the organisation of the school is differently configured at the future point in time), and given the same options, a different school, having different constituent parts, could also choose to follow a different path.

For a similar reason, when a system moves from one state of being to a new condition of stability such change is generally considered to be irreversible (Organisation for Economic Co-operation and Development [OECD] Global Science Forum, 2009; Osberg, Biesta & Cilliers, 2008). This is because the future state of the system would be different and different options may be available, or be selected, at future points of bifurcation.

The concept of emergence has been used to theorise aspects of ECE provision and practice. For example, Evans (2015) describes the dominant discourse of school readiness in the early years as following a linear, mechanistic and goal-oriented logic that impacts on the way that "early learning and development is understood and experienced" (p. 36). I interpret this as meaning that the discourse of school readiness is acting as a powerful negative feedback loop, conditioning the way components of the system act and interact with each other. She uses the concept of emergence to suggest a possible new interpretation of school readiness as a process of "becoming" (p. 40). Another early years researcher, Pronin-Fromberg (2017, p. 55), uses the concept of emergence to theorise the process of children's learning as a complex adaptive system. She discusses the transitions children make in their learning as "the space and shift between not knowing and knowing", highlighting the irreversibility of emergent processes.

2.4 Stability and change

The third concept within Byrne's definition of complexity theory is that of "transformational potential" (2005, p. 97). If a person or organisation wanted to control a system's behaviour, the concept of transformational potential would be important either in terms of retaining a status quo or in successfully introducing desired change. Complex adaptive systems are regulated by feedback loops (positive and negative feedback) that, when in a state of relative equilibrium, keep the system within a limited range of normal or desirable behaviours or qualities. Morin (2006) describes significant change occurring in a system when the feedback loops allow deviations to develop rather than stifling them. Therefore, complex adaptive systems can be seen to evolve as they respond to feedback within the system over a period of time and any adaptation could equally be an eventual assimilation or a rejection of new influences.

The nature of complex open systems is that they generally orientate towards stability. This systemic agency is not understood as the preserve of individual components but as an 'emergent' property of the whole system.

As Haggis (2008, p. 167) claims, "There is no key variable, no centrally-guiding programme or brain, and no one principle factor which makes everything happen". If system leaders understand system behaviour in this way, it should have important consequences for how they perceive their leadership role. For example, Goldspink (2007) describes a complexity informed approach to system reform in the ECE sector in South Australia where the strongly emergent knowledge of local agents was harnessed rather than introducing top-down changes that may have had a luke-warm acceptance (or even a rejection) within the system.

Order and disorder are important concepts when thinking about how and why systems such as schools remain stable or change over time. There are significant differences between understandings based on chaos theory (that have influenced some complexity theorists) and how systemic change is understood from a critical complexity viewpoint. The different understandings of system behaviour influence what is considered possible to do as a result of that knowledge, for example, when thinking about how stability or change might be encouraged in education systems. With reference to my research interest relating to two-year-olds in schools, knowledge of system behaviour is relevant to my interpretation of how the current ways of thinking about quality have arisen and for considering possible implications for the future state of the education system.

When discussing complexity in relation to educational research, both Mason (2008) and Kuhn (2008) appear to present complexity and chaos theory as sharing the same understanding of systemic change where systems are presented as always being in a disordered state and operating "far from equilibrium" (Kuhn, 2008, p. 182). However, Cilliers (1998, p. ix) dismisses chaos theory as not particularly useful when studying complex systems because it emphasises the fragility of systems and their sensitivity to initial conditions. He cites Gleik's (1998) famous example of chaos: a butterfly flapping its wings on one side of the globe setting off a chain of events that results in a tornado on the other side of the world. So the chaos viewpoint is one of systems being in a constant state of flux and change and, it seems to

me, is a deterministic one where the system is almost seen as passively subject to influences beyond its control.

In contrast, from a critical complexity viewpoint the agency, or self-organisation, of systems and their innate drive towards achieving stability is recognised. For example, Morin talks about complexity in terms of order, disorder *and* the orientation of systems towards organisation (1997/1992, p. 101). Cilliers (1998) claims that complex systems are actually very robust because of their survival behaviour when responding to change in environmental conditions. The ability of systems to operate under different environmental conditions by adapting and changing, or rejecting change is reflected in the terms used within CT such as 'complex adaptive systems' or 'dynamic systems'. That systems are described in these terms reflects the fact that complexity is understood in terms of process rather than a fixed property of systems (Koopmans, 2017). If Morin's analogy is correct, it also suggests that systems are seen as responsive or sensitive to local conditions but, I would argue, not in a fatalistic way.

2.4.1 Open systems are unpredictable

The concepts of unpredictability and irreversibility associated with bifurcation and emergence have important consequences for understanding change in education systems and what may be possible as a result of that knowledge. The concept of unpredictable system dynamics has been termed by Morin (2006, p. 21) as the "ecology of action". This is where any new action or idea that is introduced into the environment (intentionally or not) has the opportunity to interact within a complex network of connections, each with its own feedback to parts of the system. Morin (2006, p. 21) emphasises the point that once the action or idea enters the system "it escapes from the will and intention of that which created it" and could even have the opposite effect to the intended outcome. Therefore, when governments introduce new education policies with a particular intention (which may or may not be achieved), it is entirely probable that the policy messages and implementation will react with parts of the system in unplanned ways such that other unintended consequences could also result.

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Complexity scientists believe that it is theoretically possible to understand and control a complex open system. An OECD report on the applications of complexity science for public policy described complexity science as "devoted to understanding, predicting and influencing the behaviour of complex systems" (OECD, 2009, p. 2). This intended use of CT demonstrates a guiding difference between the way that the traditions of complexity science and critical complexity interpret system behaviour and self-organisation. In contrast, from a critical complexity viewpoint Davis and Sumara (2008, p. 42) claim that for educators and education researchers "it is not (yet) clear to us how we might tinker with negative and positive feedback loops". This claim is underpinned by a belief that the behaviour of complex systems is unpredictable and therefore cannot be tightly controlled. This is because some of the interactions within a school system will be known and visible and others will be unknown, unexpected and/or indirect. For example, the way in which individuals or teams within the school system engage with external influences such as the school readiness agenda or external accountability systems will have an impact on immediate and future possible interactions, not all of which will be obvious or predictable. In other words there is always an element of unpredictability and messiness in a complex system.

2.4.2 Applying complexity theory to system management and the concept of power

Although survival behaviour is understood as an innate property of systems, knowledge of how this occurs can be seen to influence how systems are managed. It is claimed that there are some properties of systems that make them more likely to survive. Davis and Sumara (2008) discuss the concepts of diversity and redundancy in systems. They explain that diversity in the components of a system means that there is greater capacity within the system to learn (and by inference, improve): "a successful collective is not just more intelligent than the smartest of its members, but that [it is successful insofar as] it presents occasions for all participants to be smarter" (p. 38). This could refer to the system's capacity to remain stable or to transform. Davis and Sumara further explain 'redundancy' as the presence of similarity between components of a system. This, they claim, both

enables effective communication between parts of the system and also helps the system to maintain stability if part of the system is lost (for example, a teacher leaves).

Complexity reduction is a strategy where individual choices of how things are done within an organisation are limited and stability might be achieved or maintained, for example through formal processes such as induction, appraisal and professional development. Biesta (2010) explores the concepts of politics and power when he writes about the function and impact of complexity reduction in education systems as a means of controlling system behaviour. He argues that when those managing or governing a system, such as DfE or headteachers, use methods that reduce complexity it can stifle the self-organisation of systems because the connections and possible choices are reduced to such an extent that emergent behaviour is also stifled. This means that the behaviour of the system becomes less complex. Therefore, depending on perspective, complexity reduction can be seen in both positive and negative ways. It may be seen as a positive strategy by those who want to steer particular behaviours in a system, but for those who feel that they have no choices in how they are being made to operate it could feel restrictive.

Feedback loops carrying messages through a system can be long (indirect) or short (direct) and can also have different strengths of effect. This phenomenon is described by Jorg (2017) when he highlights the impact of power relationships within systems and cautions that the relationship between 'A and B' is different to the relationship between 'B and A'. A system's state of order/disorder is conditioned by multiple and complex environmental factors and multiple and complex interactions between the constituent parts of the system and its wider environment. The strength of impact of these interactions and environmental factors is not fixed. For example, when thinking about the perceived pressures or expectations of Ofsted as just one influence on school systems, the way schools respond to such pressures could be very different and will be influenced by a complex array of interacting and contributing factors.

An example of self-organising behaviour is that as new staff join a school or new practices are adopted the changes can be assimilated into the existing organisation. Sometimes through negative feedback loops, or lack of feedback through the system, changes are rejected or abandoned. As changes are introduced the school is altered from its previous state but as long as the organisation can cope with the number and speed of changes it is still recognisable as the same school. For those wanting to influence the state of a system, this information could be used in divergent ways. For example, Trombly (2014) cautions against short-term interventions because of the time it takes for emergence to happen and for new practices to become the new norm. In other words, it takes time for new practices to become embedded in a stable system and too much change at once could be counterproductive. However, where the object is to effect significant systemic change, one strategy would be to thwart the self-organisational behaviour of the system by destabilising it.

During the last Coalition Government, it appears that the Education Secretary, Michael Gove recognised that he needed to destabilise the education system and those he perceived to be influencing it that he referred to as the "enemies of promise" and "The Blob" (Gove, 2013, para. 18). I interpret his 'Blob' comment as a reference to the self-organising survival behaviours of the education system. It could be argued that the following strategies were intended to thwart the self-organising behaviour of the education system in order to give newly introduced education policies the chance to become embedded by:

- Introducing changes at a relentless pace arguing,"lest anyone think we should slacken the pace of reform - let me reassure them - we have to accelerate" (Gove, 2012c, para. 53).
- Introducing strategies to reduce the influence of those who had different educational values (Young, 2014; Gove, 2013). This included i) driving forward the academies programme at ever increasing speed where unions have less power, ii) removing quality improvement responsibilities from local authorities and making Ofsted "the sole arbiter of quality" (DfE, 2013b, p. 11), and, iii) strengthening

the hand of teaching schools thereby reducing the influence of universities.

I discuss these systems-influenced disruptive strategies further in section 4.3.2 as an example of a specific understanding of quality – how to get more for less.

2.5 Using a critical complexity methodology in research

The paradigm of complexity is rarely to be found in educational research methodology text books and where I have found it, it has been a brief addition to an updated edition (Cohen, Manion & Morrison, 2011) or a postscript (Blaikie, 2007). In those texts, as in many of the research papers I referred to in section 2.1, complexity is essentially proposed as a theoretical framework to understand the educational research topic rather than explicitly informing the way that the research process is carried out. Cohen et al. (2011) merely suggest that certain forms of research methodology such as action-research, case-study, multi-method and multi-perspectival approaches would be appropriate when using a complexity theoretical approach. The only educational research I have found explicitly using a complexity methodology are those using multiple case-studies (Wetzels et al, 2016; Hetherington, 2013). For example, Hetherington uses the two concepts of emergence and complexity reduction to inform her methodological approach. She claims that:

> complexity offers the potential to re-think common research methods and strategies as a result of its particular ontological and epistemological base, thus influencing the research design, methods, and analytical or interpretive techniques that might be considered. (2013, p. 76)

I take this to mean that it is important to consider how the concepts used in complexity theory impact on the interpretation and use of research methods to achieve a good match between the theoretical framework and the methodology. Therefore any methodological 'borrowing' must involve adaptation, not just adoption (Davis & Sumara, 2008).

Criticisms of CT highlighted by Morrison (2008, pp. 29-30) are i) that complexity can only describe the past or present and therefore has little to

say about how things could or should be in the future, ii) that it "describes the amoral law of the jungle" but does not take into account values and morals and iii) that there are no conceptual tools to support the use of complexity in research. I believe that much of what Morrison is critiquing here is the result of the confusion of multiple understandings of CT that I highlighted in section 2.1. However, since there is now a clearer distinction in CT between the positivist complexity science and the constructivist critical complexity approaches, I think that Morrison's arguments can all be challenged from the latter viewpoint. For example, Cilliers (2005) makes the case that predicting the future of a system is never the intention and is not considered possible from a critical complexity viewpoint. He links this understanding of system behaviour to the ethics of a critical complexity methodology; findings can only ever be modest, which is a responsible rather than a weak position.

Another criticism of CT is that it is faddish and offers nothing new - there are plenty of other approaches to research that look at problems from different perspectives (Abraham 2001). There is undeniably some truth in this argument. A key feature of a critical complexity approach is the methodological pragmatism of using ideas from other disciplines in a way that "emerges from the needs of the enquiry [producing research that is] inquiry-driven rather than discipline driven" (Montuori, 2008, p. xxvii). Using knowledge from the disciplines of education and business management could be one way of achieving the dialogic approach encouraged by Morin. The caveat that is consistently applied to such borrowing is that it should always be done in a reflexive way.

The methodology I am using is based on the work of Edgar Morin whose methodological approach is pragmatic, encouraging researchers to borrow ideas from different disciplines as their research requires. Because there is no single way of applying Morin's work, Montuori (2008, p. xxxv) describes Morin's method as "understood in the broadest sense of the word, as a "way" or "path laid down in walking"". Rather than providing a clear set of directions to map the way on this journey Morin raises questions and dilemmas that support researchers in constructing their own methodology; to do what Sikes (2004, p. 16) refers to as "philosophical thinking work". What

follows in the remainder of this section is my interpretation of Morin's complexity methodology. I discuss three main issues that Morin raises about methodology. The issues are interconnected, as are the solutions he offers. First is the problem of how to think in a complex way and overcome the binary "either/or" style of thinking that Morin (2008, p. 15) argues dominates classical science. Second is the problem of the "inseparability of the separable" (Morin, 2006, p. 16); how researchers organise information to understand their research context and the impact it has on knowledge that is generated. Third is the issue of managing the inevitable "messes" (Morin 2008, p. 6) produced by a complexity theoretical methodology.

2.5.1 Thinking in a complex way

According to Morin, the problem with the manner in which much research is carried out stems from the way our prior educational experience has shaped us. He claims that our capacity to separate in order to understand things is overdeveloped and our capacity to connect is underdeveloped. Morin argues that in order to improve our understanding of the world we need to develop the capacity for both: "knowing, is at the same time separating and connecting, it is to make analysis and synthesis" (Morin, 2006, p. 21).

In *Seven complex lessons in education for the future*, Morin made the claim that beliefs and ideas can literally "possess us" (Morin, 1999, p. 10). This occurs because we are both products of the society we inhabit and influenced by dominant ideas in the education system we have experienced. He argues that a form of intellectual blindness may result from being unaware that we "know, think, and act according to interiorized culturally inscribed paradigms" (p. 8). Morin highlights the danger to be found in relying only on what he views to be the dominant mode of Cartesian thought, that separates phenomena to understand them in a binary either/or fashion (p. 9). One reason he gives for this danger is the ease with which rationality can transform into rationalisation (Morin, 2008), where anything that does not fit within the "culturally inscribed paradigm" (Morin, 1999, p. 8) tends to be rejected as irrelevant or wrong.

Morin offers no easy solution to this particular dilemma. In his Foreword to Morin's *On Complexity,* Montuori makes the case very strongly that for Morin the paradigm of complexity is not a panacea, but merely a way of thinking, "a way of approaching the organization of our thinking and thinking about organization" (2008, p. xxviii). Morin argues that "For "either/or" we substitute both "neither/nor" and "both/and" [in order to produce a] complex unity, that links analytical-reductionist thinking and global thinking, in a dialogic" (Morin, 2008, p. 33). By 'dialogic' Morin is referring to "the union of two antagonistic terms in order to understand a complex problem" (Morin, 2014, p. 19). I consider my attempts to explore how quality is understood in relation to the policy of having two-year-olds in schools from both ECE and business management perspectives as an example of a dialogic approach.

Dialogical method involves researchers striving to recognise the aforementioned 'culturally inscribed paradigms' that either make or prevent them from viewing the world in a particular way. Such self-reflection means that the researcher is necessarily part of the observation process and therefore cannot be considered objective. Of course, the idea of an objective observer is widely critiqued in the social sciences, a critique that complexity theory is in sympathy with. Nonetheless, Morin's complexity approach adds the important dimension that a "meta-point of view" (Morin, 2008, pp. 50-51) should be attempted. Morin (2008, p. 51) likens it to climbing to the top of a watch-tower in order to view the subject within "'the society and its outside environment". This way of objectifying the subject enables it to be positioned in the wider context of its environment whilst still recognising the observer as part of the scene.

2.5.2 The inseparability of the separable

The second of the three dilemmas, the "inseparability of the separable" (Morin, 2006, p. 16) is a central problem within a critical complexity methodology. As highlighted above, it can be found in the subject/object dilemma of the researcher who cannot be separated from the research object (Contini, 2013). It can also be found in the system being studied, the researcher, and the researcher's actions. For example, there is the problem of knowledge generated by the researcher that, because of the complex

nature of the world, could never fully account for the complexity of what is being studied and has been impacted by choices made by the researcher. Acknowledging some aspects of context and ignoring others can have a huge impact on the knowledge produced (Morin, 2006). There is also the problem of what is unknown or incomprehensible to the researcher. Cilliers (2005) argued that these are all ethical dilemmas which must be acknowledged, and which I add, need to be carefully negotiated.

Boundaries need to be drawn around social systems in order to study them, but how those boundaries are drawn and perceived impacts on the research outcomes. Depending on a researcher's perceptions, there could be many ways of describing system boundaries as well as what sits within them. From a critical complexity viewpoint anything outside a boundary is considered as having the potential to impact on anything within. Morin (2008, p. 20) describes the boundary as a "frontier [that] is at the same time the point of closure and of communication". Here he is referring to the concept of open-systems that need boundaries to be distinguishable and yet, in order to survive, those boundaries need to be fluid or flexible in order to take energy or information from the outside. Therefore, although systems may be separated from their wider context in order to study them, they are simultaneously understood as still joined to their environments as a matter of necessity. This is part of the 'messiness' I discuss in the next section.

Systems consist of individual, interconnected parts (some of which may be considered as systems in their own right). Morin (2008, p. 39) argues that in positive methodologies, where there is what he calls a "principle of simplicity", understanding is achieved either through "disjunction" where linked phenomena are separated, or "reduction" where phenomena that are separated are then joined together; reduced to a common denominator. However, following the dialogic principle introduced earlier, a complex way of thinking about parts of a system would be to still separate, but also to combine and compare in order to understand the system. Morin (2008, p. 6) terms this "a paradigm of disjunction-conjunction that will allow us to distinguish without disjoining, to associate without identifying or reducing".

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Drawing on Morin's complexity work, the Italian researcher, Contini (2013), calls for a methodology that is dialogic and simultaneously recursive. An example of recursivity is the idea that we are at the same time both product and producer of our environments. Following recursive logic, the earlier argument (see section 2.5.1) that we are the product of/possessed by our context and education could be expanded to say that we are also producers of that context and education. Extending this idea, Morin (2008, p. 50) talked about a "holographic principle" where he claims that "not only is the part in the whole but the whole is in the part". This means that in many ways, findings from an investigation of system behaviour at school level might be replicated in parts of the wider education system to which the school is connected and to micro systems contained within the school system such as classrooms and teacher/learner relationships.

An example of the holographic principle is Trombly's claim (2014) that problems present in the whole system can manifest themselves in different ways throughout the constituent parts of the system. Following this line of argument I would expect that themes such as school readiness that I explore in subsequent chapters would be evident at different levels of the whole education system. Within a critical complexity methodology these three principles; dialogic, recursive and holographic, require that the parts of the whole are considered within their environment or context and vice-versa.

2.5.3 Dealing with 'mess'

The last of the dilemmas is that if reality consists of "order, disorder and organization" (Morin, 2008, p. 62), it would seem perverse to study only the stable, predictable elements of our world, or to treat everything so. Morin (2008) claims that disorder is part of how the universe functions and that we need to find ways to cope with it. Further, although order and disorder are opposing phenomena, he makes the case that they have a complementary relationship within complex adaptive systems. In contrast to what might be described as a neatly ordered scientific approach to complexity, a critical complexity approach is inevitably messy because it has to be able to take account of disorder recognised within the system being studied. The very fact that this methodology invites researchers to carry out two antagonistic

functions at the same time; looking at the same problem from different viewpoints, as well as taking account of recursivity in the system; the impact of parts of the system on the whole system and of the whole on individual parts, means that the approach is not going to be a tidy one either in design or analysis/synthesis. There will also be messiness because the methodology needs to try to take account of any unpredictable connections and emergences that occur within a system. The problem here is how to manage the mess so that any findings can be presented coherently to the reader.

Dealing with messiness and making sense of any subsequent findings for future readers necessitates a certain amount of simplification. Too much simplification and the research will lose its appreciation of complexity and too little simplification could result in complication and confusion. Therefore, as in complexity science, a method that includes an element of complexity reduction is desirable, for example, by considering parts separate from the whole. However, as I have detailed earlier, it is important that although disjoined, each part of the system is still understood as connected to its wider context. Morin draws attention to the significance of the part-whole relationship when he refers to the Latin meaning of the term complexity (or complexus) which means "that which is woven together" (Morin, 2008, p. 5). Viewed in this way as a woven fabric, each strand of thread may be separate but needs to be viewed as a collective to see any pattern on the fabric.

The unpredictable nature of complex open systems is another aspect of the messiness. Acknowledgment of unpredictability forms a key difference between complexity science and critical complexity methodologies. In the latter, knowledge is considered to be provisional and contextually situated and therefore impacts on research findings. As Cilliers (2005) argues, any claims can only ever be modest ones because they are not considered to be faithfully replicable in another context.

2.5.4 My interpretation of Morin's critical complexity methodology

A critical understanding of complexity theory presupposes that had the researcher chosen differently or had a different researcher studied the same

things, then different perspectives would have produced different outcomes (Human, 2015). I believe that the same argument could be made for how different researchers interpret and then implement a complexity theoretical methodology based on what they have read on the subject and how they have individually interpreted the information. According to my understanding of complexity theory, a researcher might adhere to the following principles:

- Separate components within the system being studied in order to understand them. Do this by carefully identifying cases to represent different aspects of the system;
- Combine and connect components within the system being studied in order to understand how they interrelate, for example by searching for links and differences between cases;
- Understand that systems are open and are impacted by phenomena outside the boundary created by the researcher (which may or may not have relevance to the research now or in the future);
- Understand that actions in one part of a system can interact, sometimes in unexpected or unintended ways, with other parts of the system;
- Do not be restricted by traditional disciplinary boundaries - use approaches and concepts from different disciplines if it seems appropriate and useful;
- Understand that you cannot be separated from the system you are researching. Mitigate for this by trying to achieve a meta-point of view, explaining your positionality and taking a reflective stance.

2.6 Chapter conclusion

Complexity theory provides a useful framework to conceptualise both the self-organisational behaviour and the management of open systems such as schools and the wider education system. The ontological and epistemological basis of how CT is understood impacts on how it is believed that change can be introduced, accelerated or stifled within a system and is therefore of relevance when considering change such as 'quality improvement' in the school system. In subsequent chapters it will be seen

how CT is also relevant to understanding how ideas about quality have developed over time and spread between the education and business sectors.

A key concept within CT is that open systems have the potential to transform themselves or be transformed and this is understood to be an irreversible process. Systemic change occurs as a consequence of positive and/or negative feedback loops within the system that may or may not be intentional. Particularly pertinent to this thesis is the idea that both established and new system behaviours can be abandoned or fail to become embedded because of negative feedback or lack of feedback in the system. In the next chapter I provide more detail about the critical complexity methodology I use, why I believe it is an appropriate choice and what the consequences of making such a choice may be.

Chapter Three - Methodology

In Chapter One I introduced my epistemological beliefs and my motivation for carrying out this particular research and in Chapter Two I explained my choice of methodology and the concept of critical complexity that I use as a theoretical framework. At the end of the last chapter I introduced Morin's critical complexity approach to methodology and here I explain how I have applied it to my research. Kuhn (2008) argues that if researchers decide to use a complexity framework then, as with any other research, careful thought needs to be given to why and how that framework is being used. I was drawn to Morin's 'messy', complex approach because of his refusal to follow reductionist paths or simplistic arguments. Instead, like Morin, I recognise that there may be multiple influences acting upon individuals and groups. I also believe that this is the right methodology for me because it provides a structure to recognise my own part in the system and the influences on me, as well as the influences that I may have on others.

The sixth of Morin's *Seven complex lessons in education for the future* (1999) is about how education should support understanding of one another and avoid the negative outcomes that derive from dichotomous explanations and rationalisation. He advocates a complex approach that looks at situations from multiple viewpoints and, without necessarily agreeing with what is found, tries to understand how different perspectives have been reached. This way of thinking appeals to the way I see the world as a richly connected system where different choices made in different contexts have produced different results – fully aware that many alternative outcomes could have been produced. Therefore, I want to explore what has brought various protagonists, separately and collectively, within the English education system, to different understandings of the purpose and implementation of the two-year-old FEL initiative.

The following sections of this methodology chapter detail how I went about my research design. First I discuss my positionality and how my experiences, interests and values have impacted on my choice of study. Next I explain how I selected my sample in order to describe the boundaries I

have drawn around this research and the possible implications of my choices. Then I discuss the interview process and consider how I, as a practitioner and as a researcher, am positioned within the system I am researching and how this could impact on the research outcomes. Finally I discuss the use of cases and the approach I used to generate and make sense of data.

3.1 Positionality

Research within the social sciences in terms of subject, methodology and interpretation, is heavily influenced by the researcher's positionality (Clough & Nutbrown, 2012; Sikes, 2004). Cohen et al. (2011, p. 3) also highlight axiology, how our values and beliefs impact on what we perceive as valuable, as another important aspect of how researchers design and carry out research. I believe that my view of reality is unique to me and has been shaped by my experiences including experiences of my gender, culture, society and education. It is something that has evolved and will continue to evolve over time. I therefore believe that there will be many other views of reality with no 'one truth'. This view of the world is at odds with what might be described as the positivist view that there is an objective, independent truth out there that is waiting for researchers to carefully uncover. Instead it aligns with a view where knowledge is socially constructed (Sikes, 2004).

My ontological and epistemological views lead me to believe that there is no objective truth about what quality looks like for two-year-olds. However, I do think that meaning is created and perpetuated within communities such as ECE and business communities and this I see as aligning with Crotty's (1998, p. 9) description of the constructionist view where "subject and object emerge as partners in the generation of meaning". Drawing on the concept of recursivity (see 2.5.2) I believe that my experiences as part of the ECE and business communities have shaped the way I now understand quality and had I not had those experiences some aspects of that knowledge would remain largely unknown to me. These realisations have helped frame the constructivist epistemological point of view that I adopt here.

My motivation for carrying out the research was driven by professional curiosity and also by values. My core values of fairness and responsibility towards others have influenced how I understand social justice. I position myself with those who perceive it as a collective, social responsibility rather than an expression of individual opportunity. Following the recursive principle of CT outlined in the previous chapter, I also conclude that I am at the same time product and producer of my environment because i) I have influenced others and ii) the way I perceive my environment is coloured by these values. Clearly, I need to be conscious of this when trying to take a meta-point of view of the system I am researching.

I have a strong interest in work with two-year-olds because I see its potential to contribute to social justice by supporting children and families and 'closing' the achievement gap (Education Endowment Foundation, 2018) between children identified as 'disadvantaged' and their more affluent peers. It makes sense to me that, given a good start, these children will be in a better position to take advantage of what later education has to offer (in the education system they inhabit) and that they may even have better life chances. On the other hand, I am troubled by the assumption that all of the 40% of children who live in families eligible for the two-year-old FEL offer are 'disadvantaged' or at risk of poor outcomes (HMG, 2012).

I also feel conflicted about the government's approach to measurement and accountability. I can see that the results of measures that are being reported in ECE are improving steadily which therefore increases the chances of more children achieving well later in their educational careers. However in my LA role I witness the negative impact of the accountability culture on schools, leaders, individual practitioners and ultimately children. My current job role and my prior experience as a nursery owner mean that I have a foot in both camps. I am enculturated into the field of ECE with its understanding of best practice for young children whilst at the same time I can understand some of the business and management viewpoints. At times they feel like extremely different worlds of thought.

3.2 Methods

Given my prior interests and experiences that have influenced how I view the world, I now see my decision to look simultaneously from both ECE and business management perspectives at the issue of quality for two-year-olds in schools as a natural, perhaps even an obvious choice for me. The design of this research moves from the levels of macro to micro system perspectives. Firstly, in Chapter Four I use a dialogic approach which, in a Morinian sense, means exploring the issue of quality from opposing points of view. In this case I explore how quality has been understood over time in both the wider business management and ECE sectors. Then, in Chapter Five I home-in on policy influences on the ECE sector since 2004 that have impacted on how quality is currently understood for two-year-olds. Finally in Chapters Six and Seven I draw a sharper focus on how quality was understood in four schools in a particular Local Authority during Summer 2014 when these schools had just started to offer places for two-year-olds. According to my understanding of systems, I would expect to find recursivity and connections between the different levels of the system.

The remainder of section 3.2 describes how I went about the layer of the research that was undertaken in four purposefully selected schools. Before approaching any of the schools I had to apply to the University of Sheffield, School of Education for ethical approval. This was granted in January 2014 with some suggestions about how long to keep copies of the interview recordings and to simplify an information sheet to parents. There was also a suggestion not related to the ethics of the research, but nevertheless helpful, that I might want to review the amount of interviews I was planning to carry out as the study progressed. This was indeed what happened as I will explain in section 3.3.2.

3.2.1 Drawing a boundary around the system: the inseparability of the separable

The LA in which I work is one of thirty-six metropolitan boroughs in the North of England and it sits within the third most deprived local authorities in England according to the Index of Multiple Deprivation 2015 (DfE, 2018b). The LA was part of the two-year-old FEL pilot from phase two (see Chapter

Figure 1: System Map Summer 2014 (not to scale) representing the five organisations within the boundary of the case study

Key:

→ Known influences

▬ Organisation boundary

▬·▬ EYFS boundary

····· 2YO boundary

X Me in LA role

X Me in researcher role

Sycamore Primary

Willow Academy

Oak Primary

EYFS team **X** X

Local Authority

Maple Academy
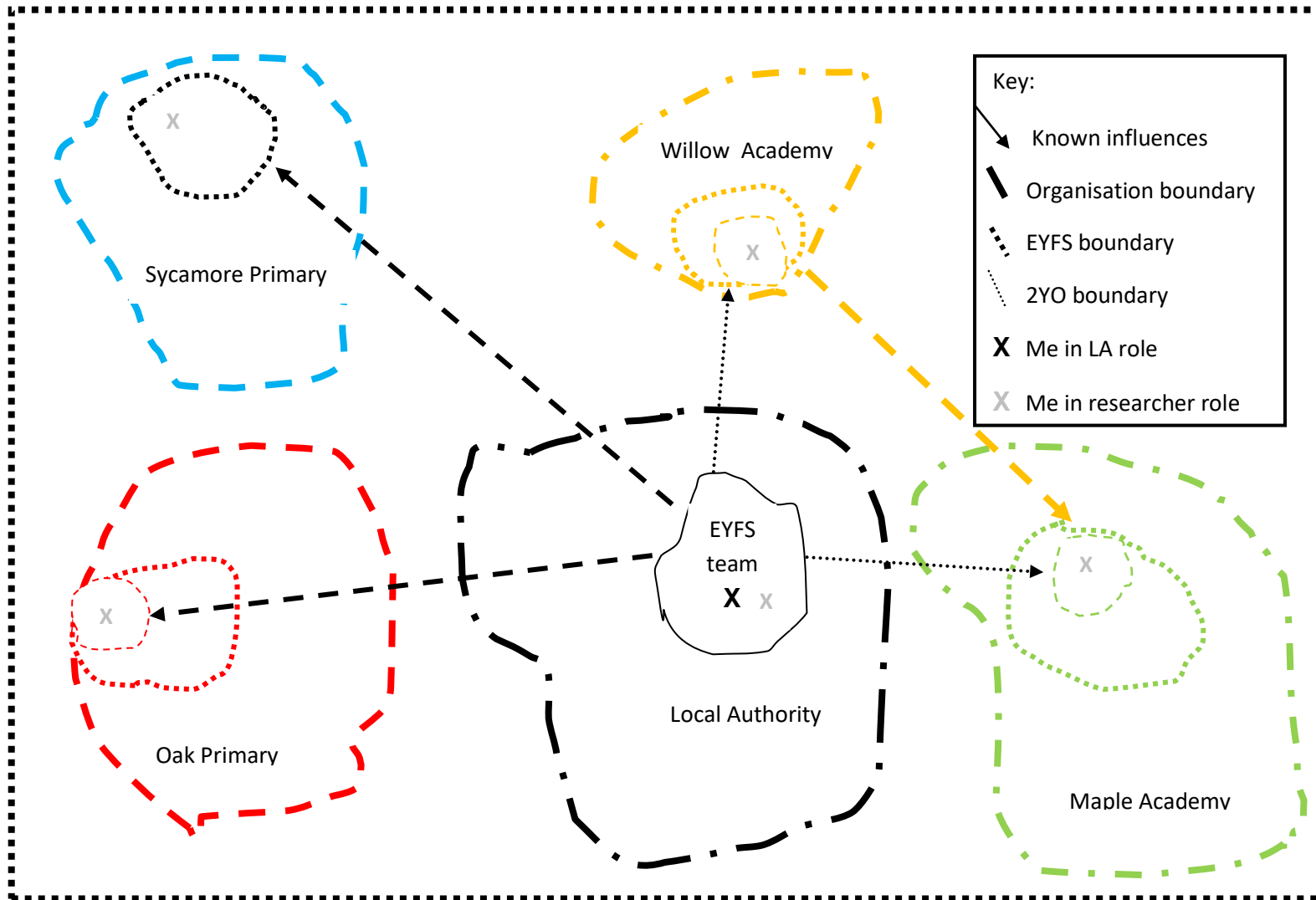
Five, Figure 5: Timeline showing the development of the two-year-old FEL initiative 2004-2015), however, at the time of the research there was no specific strategy in the LA for encouraging schools to take two-year-olds. During the academic year 2013-2014 in which the research took place, the LA had offered one half-day information session for schools that were considering taking on two-year-olds. This session focused on appropriate physical and emotional environments for younger children. It included an introduction to the *Infant/Toddler Environment Rating Scale* (ITERS-R) (Harms, Cryer and Clifford, 2006), and the publication "*A good place to be Two. Developing quality environments indoors and out*" (Community Playthings & White, 2013) was distributed. Some schools contacted the LA directly for support in setting up provision for two-year-olds. Access to either of these sources of support is detailed in the vignettes to be found in Chapter Six where participants described the preparations they made for taking younger children (see section 6.2).

I consider the geographical area covered by the LA to be the 'case' and the boundary of my study. The boundary could not be smaller because it needs to contain the four case schools and the team within which I work. It does not need to be larger because a critical complexity understanding of open systems positions the LA as connected to and therefore open to the influences of the wider English education system, and vice-versa. Further, drawing on the holographic principle (see section 2.5.2), I would consider it likely that some phenomena evident at school level would be evident elsewhere in the wider education system.

Figure 1 is my interpretation of a simplified map of the system that represents the known relationships between the four case schools and the EYFS team to which I belong. The large rectangle represents the geographical area within which the four schools and the Local Authority as an organisation sit. Within each school there is an EYFS department and in three of the schools there is a separate two-year-old provision. The amorphous shapes of the organisations represent the fluidity and changing structures that are common to social systems. The broken lines of the organisational and wider LA system boundaries represent the notion of the

inseparability of the separable where ideas and influences are able to travel between systems. The arrows of different line widths represent my perception of the different strengths of influence that occur between the LA and the different kinds of school organisation and indicate a stronger expectation of influence between the LA and maintained schools than with academy schools. The arrow between Willow and Maple academies represents the strong influence of the established multi-academy trust school on the newcomer to the organisation. Finally, I position myself on the map in both my roles as LA representative and as researcher. Carrying out research within one's own work context can be seen to present advantages and disadvantages (Mercer, 2007) and it also brings additional ethical considerations that I discuss throughout this section.

As with choices of methodology, Sikes (2004) says that choices of methods are influenced by the personal preferences of researchers as well as practical considerations; "what can actually be done" (p. 17). The fact that I am self-funding my studies and undertaking the research entirely in my own time had two important consequences. First, I needed to interview schools in my own LA. It would have been very difficult to access practitioners for interview in other LAs because I can only take annual leave during school holidays. Mercer (2007) suggests that such practical considerations would not be unusual for those undertaking a professional qualification such as an EdD. Second, because I had chosen to interview in local schools I then needed the support of my line manager and other senior leaders to undertake the research. Whilst my line-manager was aware of which headteachers I was going to approach, in line with British Educational Research Association [BERA] (2018) guidance on confidentiality, it was understood that I would not disclose to her which schools or practitioners eventually participated or anything that arose from the interviews unless it was a safeguarding issue that needed to be shared.

Researching in my own LA has implications for how I perceive myself to be situated in relation to the system I am studying. However the binary of insider/outsider researcher does not sit well with my understanding of complex open systems. Instead I perceive my relationship with the research

context as fluid and changing (Hanson, 2013; Thomson & Gunter, 2011; Mercer, 2007). I recognise Mercer's description of the researcher's insider/outsider status as "a continuum with multiple dimensions" (2007, p. 1). When conducting the interviews, the extent to which I perceived myself to be 'inside' or 'outside' depended on the situation; the school, or the relationship I developed with the interviewees. My complexity viewpoint means that I also see the contextual conditioning of the situation in temporal terms. Thomson and Gunter (2011) talk about the change in their identities over time when undertaking research on a school site over a long period. Although my data collection involved just one visit to each school and was all completed in Summer 2014, I can still see connections between my situation and the one they describe. In my professional capacity I have continued to have relationships with some of the schools and not with others. The strengths of these relationships wax and wane depending on work situations. Ethically I need to be aware that insider/outsider relationships have the possibility of impacting on the research at all points during the process and not just at the time of the interviews.

3.2.2 Selecting the case schools

After deciding on the geographical LA boundary, the next practicality I needed to address was how to select participants. Following Morin's (2008, p. 4) notion of a "unitas multiplex" made up of multiple parts connected to the whole it seemed appropriate to me that, just as a LA might be considered as a part of the whole English education system, a school system should be considered as one 'part' of the LA whole. Therefore, in order to deal with the complexity of the problems being researched, I needed to purposefully select schools as comparative cases (Human, 2015) to represent different examples of schools as systems in their own right and as parts of the wider LA system.

At the time of the interviews fewer than 10% of schools with nurseries in the LA had committed to providing two-year-old FEL places compared with over 60% to date in 2018 – this narrowed the field for selection considerably. I approached four schools (see Figure 2) that had just started to take younger children at a time when it was not standard practice. I use pseudonyms to

describe each school, purposefully chosen because they represented four different approaches to providing places for two-year-olds that I could recognise in the LA at the time:

Maple Academy	A new, 16 place, off-site nursery provision for two-year-olds.
Sycamore Primary	An EYFS unit with places for 45 reception and 26 nursery-aged children, including 'rising three' places using a maximum 1:13 ratio for up to 4 children from their third birthday. Children accessing two-year-old FEL places use the same indoor and outdoor spaces as all of the other children.
Oak Primary	A newly developed, self-contained 12 place two-year-old room adjoining the three to four-year-old nursery. The two-year-olds have a small fenced-off outdoor area that leads to a larger outdoor space shared with the rest of the nursery.
Willow Academy	Following the closure of a Children's Centre nursery the building and remaining staff were taken over by the school. The school moved its existing three to four-year old provision and staff into the newly acquired building and took over the existing 20 place two-year-old provision. The two-year-olds have access to their own large outdoor space.

Figure 2: Table of schools in the study

As gatekeepers to their organisations, I approached the headteachers for school level permission before approaching the EYFS staff. Crowhurst and Kennedy-Macfoy (2013) argue that the outcomes of gatekeeping behaviours can impact on research processes and/or findings. The concept of the ecology of action, where ideas can react within and beyond the system in unexpected ways, made me sensitive to the possibility that, with the exception of the headteacher as gatekeeper, participants may have felt a real or perceived pressure from within the school organisation to take part.

Additionally, as the two-year-old ventures were new and many of the staff teams newly employed, the perceived pressure to conform within a new organisation may have been greater for some staff.

When I met each potential interviewee I made it clear that, although I had the permission of their headteacher, each individual member of staff had the right to make up their own minds about whether or not they wanted to take part in my study, and that they had the right to withdraw permission at any time in the process without giving a reason. In addition to written information (see Appendix 1: Information to schools and Participants consent form) at the start of each interview I explained the rights and responsibilities of participants and mine as a researcher before starting the conversation. I felt that this was important because I was aware that the participants may have felt obliged to take part because of any perceived authority they may have felt I had when I worked with schools in a LA capacity. It was therefore crucial that I emphasised that the research was outside my LA role and that all information shared would be kept in the strictest of confidentiality unless there was a safeguarding concern.

The intention of approaching practitioners working directly with children as well as school leaders was to have a potentially broader range of views. In retrospect I think that the four schools I approached gave me four quite different cases for comparison and I do not think I could have improved the variation between the cases within such a small sample in structural terms, for example, numbers of two-year-old spaces offered, how two-year-olds were integrated with or separated from older children and the experience and qualifications of staff. Where I could have improved my sample was in the number of participants belonging to certain subgroups. For example, in Maple Academy there were only two participants, and in the overall category of 'headteacher' I only managed to interview two participants across all the schools surveyed. I will return to this in my findings chapters to explain how I think it has impacted on my data and on any conclusions I have been able to make.

Morin's notion of the inseparability of the separable was particularly pertinent to my situation as researcher. Even though I chose schools where I had had little or no contact before, I was surprised to find that within the newly established teams there were a few people I had previously come into contact with in various work capacities. Despite my attempts to minimise impact on the outcomes of the research by avoiding obvious connections and through reflective practice, I cannot know how much prior contact may or may not have impacted on the participants. For example, if those participants behaved differently to those who were completely unknown to me, it could have been a positive impact in that they felt more at ease and able to say what they really thought, or negative in that they felt they knew my position and said what they believed I wanted to hear. Further, following the logic of open systems where parts of the system sometimes react with other parts of the system in unexpected or unintended ways, there is also the possibility that in the cases of participants who were unknown to me, I may not have been wholly unknown to them. There is the potential that they could have been influenced by my influence on other people in the system (not necessarily part of my study). I can be aware that any of these inseparabilities (or connections) might exist, however, the ability to minimise their impact is largely beyond my control and furthermore the wish to do so could even be judged as a questionable inheritance from the kind of objectivity that critical complexity rejects.

As a researcher, the separation that is more within my control, through reflective and ethical practice, is the problem of not being able to 'unknow' what I know. Ethically it is important that I separate my LA role and my role as a researcher. This means being aware of any possible impact I might have on the research, for example, by identifying potential issues or influences on my interpretation of data such as what I already know about individual participants and schools. It also means, with the exception of safeguarding issues, not disclosing things I have heard or seen in the course of interviewing participants that potentially conflicts with my LA role however uncomfortable that may feel.

3.2.3 Semi-structured interviews

As I have already highlighted in section 2.5.1, a critical complexity approach requires methods that support researchers to separate *and* connect to understand phenomena. I decided to use semi-structured interviews as I felt that they would give me the benefit of structure and comparability whilst at the same time giving me some freedom to explore answers in more depth if I felt clarification was necessary. This would be possible through other methods such as questionnaires or focus groups but I reasoned that it could add an unnecessary level of complexity to the research process. Again, following Sikes' practical advice about doing "what could be done" (2004, p. 17), semi-structured interviews were also my preferred option because I had previous experience of using the method and therefore confidence that I could carry them out effectively.

A total of seventeen semi-structured interviews took place. There were five interviews that took place in each of Sycamore Primary, Willow Academy and Oak Primary. Only two interviews took place in Maple Academy because the leaders wanted to protect the staff team from any additional pressure (the school was in the process of becoming an academy under the same executive leadership as Willow Academy). The headteachers of both primary schools agreed to be interviewed but the headteachers and executive heads of the academy schools were unavailable due to the academy conversion that was taking place.

After planning the interview questions and conducting a pilot interview, I subsequently changed the order of some of the questions. The first questions asked for opinions and examples and the final ones became the simple factual questions about the participants such as age group, qualifications, job role and experience of working with two-year-olds. I hoped that this approach would enable me to establish groups for synthesis/analysis that were not restricted to the case schools and to separate and connect in order to produce the complex method I was looking for (even though at the time of the interviews I had not yet discovered that there was such a thing as a complexity methodology).

Appendix 2 is the interview schedule I used with all participants. There are four main questions with related sub-questions that helped me to ensure some consistency between the interviews whilst also allowing for flexibility in how the participants provided their answers. The first set of questions asked about the interviewee's role in relation to provision for two-year-olds, their experience, preparation and confidence in taking on the role and, if they had a choice, their motivations for working with two-year-olds. The main purpose of asking these questions was to find out the different reasons for offering two-year-old FEL places and, by considering the existing skills and experience alongside the preparations made to ready the team, what the school felt was important for the younger children in terms of provision and practice.

The second set of questions asked directly what the practitioners believed were the schools' motivations in offering two-year-old places. Where there were multiple reasons given I asked interviewees if they thought some reasons were more important than others and also if the reasons aligned with their own views. As well as gaining individual insights I hoped that this question would give me the opportunity to consider any correlations at school system level and in combination with my final questions, explore any correlations between individuals within specific job roles, age-groups or qualification levels. As the two-year-old FEL programme is positioned as an intervention, at this point I asked an additional question of those participants in senior leadership positions about how they would measure success for these children. I anticipated that they might have answered in terms of qualitative and quantitative data however, in retrospect I think that the term 'measure' might have been better framed as 'how would you know'.

The third set of questions asked participants to 'describe high quality' in relation to early education for two-year-olds. I also asked them whether they thought the children accessing the two-year-old funding had different needs to other two-year-olds. Finally I asked whether they thought their colleagues and the parents accessing places for their two-year-olds would have similar ideas about quality. I frequently had to reframe the question relating to parents in terms of parental concerns as well as what they said they liked

about their child accessing a FEL place in school which indicates that my original question was not effective. The intention of this range of questions was to consider both what was discussed and what was not discussed, for example, whether parental ideas about quality were taken into account within the organisational structures of the school.

The fourth set of questions was about the perceived successes and challenges encountered in developing the provision for two-year-olds and the advice that they might give to another school embarking on a similar journey. The intention here was to give the participants an opportunity to evaluate their approach to preparing for the two-year-olds with the hope that it might illuminate what was considered to be important in terms of quality.

In order to protect participant's identities, at the end of each interview I asked the participants to choose their own name. This was important to me. Although I could be criticised for being tokenistic, I felt it was one of the ways that I could demonstrate respect for my participants. I was already very aware of the power relationships that might have been at play in the choice participants felt they had in taking part. I did not want to add to or confirm any of those potential power relationships by taking away people's identities and imposing others. I conducted member checks by emailing encrypted transcriptions of the interviews to participants' chosen email addresses giving them the opportunity to change or clarify the contents. No alterations or additions were made which, according to Thomas, D. (2017), is unexceptional.

3.3 Dealing with data and presenting findings

This section considers how I went about the data analysis process and particularly how I responded to Morin's dilemmas of thinking in a complex way and of managing the 'mess' produced when using a critical complexity methodology. To set the data analysis process in context, I begin by describing the trajectory of the research process and explore the impact of what I now consider to be five critical points in that trajectory. I believe that the choices made at these points of bifurcation (Capra, 1997) were significant in producing the eventual outcome of the research. I use the term

'choice' in the same metaphorical way as Capra, acknowledging that some choices are made deliberately and that some choices are the outcome of circumstances experienced within the social system we inhabit. Tracing the trajectory of the research process is a useful way of analysing the situation as the significance of choices 'made' may not always be obvious at the time they occur. With the contextual information in place, the remainder of this section then explores the use of cases and the way I carried out the data analysis.

3.3.1 Dealing with the messiness of the research process

In Figure 3 I highlight five significant points of bifurcation in the research process. A point of bifurcation (see section 2.3) is when circumstances within a system produce a situation where several paths or choices are available (Capra, 1997). However, once a path has been selected (and by inference other choices are rejected) the changed trajectory of the system is irreversible. In the period between conducting the interviews and submitting my thesis family circumstances meant that I needed to take three different leaves of absence from my studies. These absences are indicated in orange in the first row of the table in Figure 3. As I explain in section 3.3.2, the time lapse caused by my first leave of absence impacted on my ability to follow the original research design. Looking back, I now view that leave of absence as a significant point of bifurcation in the trajectory of the research process.

The first leave of absence in particular had a considerable impact on the process of data analysis and I found that on returning to the data it was as if a different version of me was doing the analysis as I took notice of different aspects of the data and made different interpretations. In section 2.3 I reference Pronin-Fromberg (2017) who uses complexity to explain children's learning as an irreversible process. In a similar way it is possible to theorise my altered view of the data in terms of complexity. If I consider myself as an open system assimilating new information from the environment to which I am directly and indirectly connected, it means that changes that happened to me (for example, acquiring new knowledge) during the period away from the data are irreversible and in that sense I was indeed a different person.

Returning repeatedly to the data over the four years between Summer 2014 and Autumn 2018 meant that there were several layers of data analysis. Further, the foci of the different iterations of analysis were also influenced by the literature referenced in Chapters Four and Five and the analysis of the literature that makes up Chapters Four and Five was influenced by what was found in the analysis of the interviews. This could be interpreted as an example of recursivity in the research process (see section 2.5.2).

When I returned to my studies in December 2015 I decided to use Garvin's (1984) categorisations of quality to analyse the data. At that point the methodology I was using might be best described as a mixed-methods methodology that was sensible to the concept of complexity. Even so, the use of business management literature in an early childhood study might be considered unusual. The following paragraph is an extract from my writing in January 2016:

> I am therefore grateful that my supervisor, although at first sceptical, agreed to let me try to persuade her of the usefulness of this approach…In fact I would go as far as to say that using the quality framework based on Garvin's categories was not just useful, but because it forms such an integral part of the way that I understand quality it was a necessary, unavoidable part of my research (Research notes, January 2016)

The second point of bifurcation in the research process was when I discovered the work of Edgar Morin in May 2016. As I described in Chapter Two, until that point I was not aware of the different interpretations of complexity theory or that CT could be used methodologically. Discovering Morin's work also introduced me to other academics working within a critical complexity framework, particulary Cilliers and Byrne. The third point of bifurcation in the research process followed very soon after the second when I made the decision to adopt a critical complexity methodology. For my part, the decision was very easy to make. However, it was difficult to enact. It meant persuading my then supervisor that this path was worth exploring as well as figuring out how to do so. The following excerpt is from an email I sent to my supervisor. I recognised then, as now, that the decision was not

Figure 3: Trajectory of the research and writing process including significant points of bifurcation
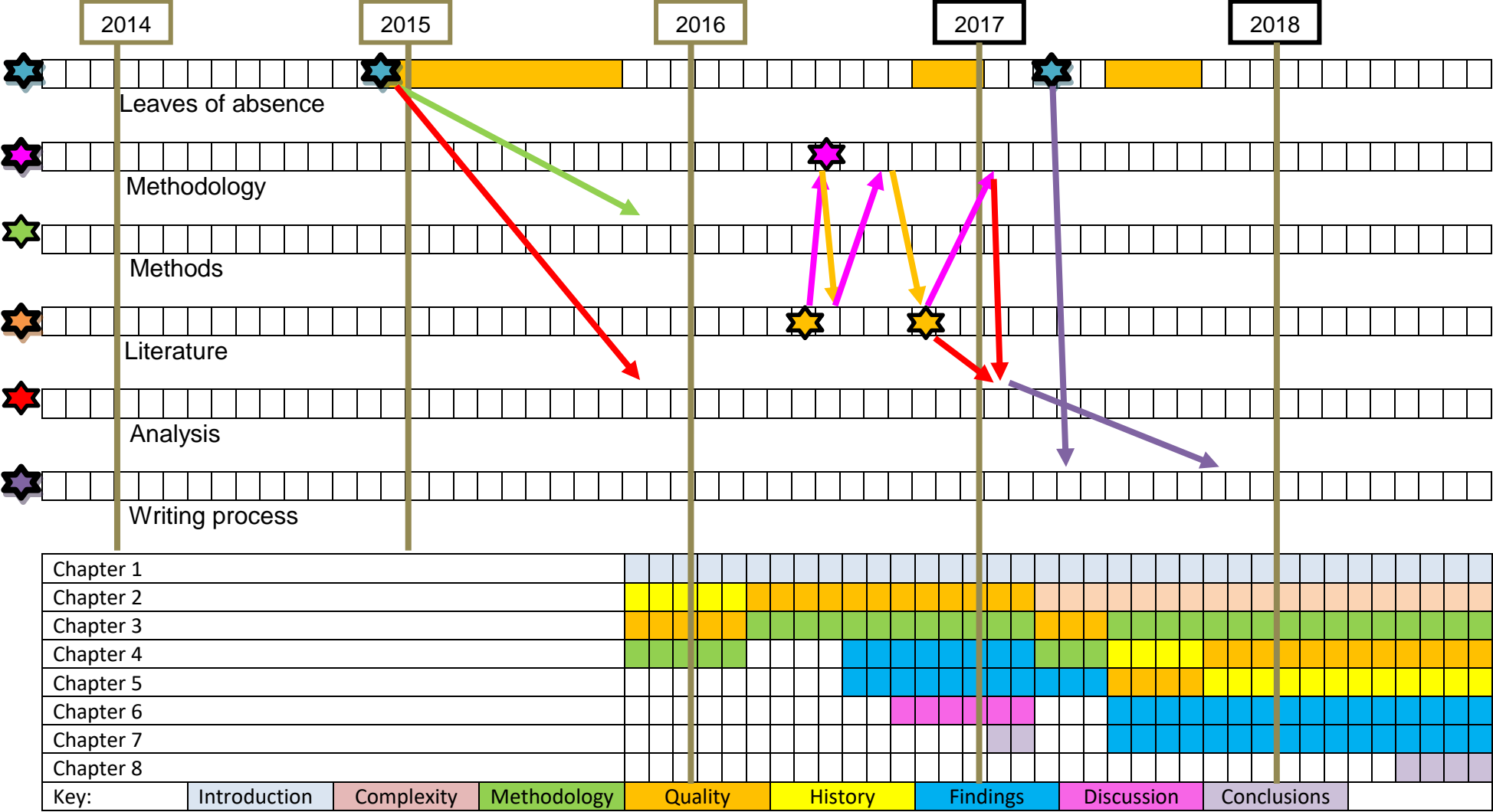
Bifurcation: December 2015

First leave of absence impacted on:

➢ My access to participants
➢ Different version of me returned to the analysis

Bifurcation: May 2016

Finding Morin's work impacted on:

➢ My understanding of CT
➢ Finding works of Cilliers, Byrne and others
➢ My methodological choices

Bifurcation: June 2016

Choosing Critical CT as a methodology impacted on:

➢ My approach to methods, analysis and structure of the thesis.

Bifurcation: October 2016

Re-reading the literature on case study impacted on:

➢ My perception of the 'case'
➢ How it could be used in a Critical CT approach
➢ How I analysed the data and presented findings

Bifurcation: March 2017

Supervision discussion impacted on:

➢ My confidence to explore whether a non-traditional thesis structure was appropriate for my study
➢ My confidence to pursue Critical Complexity as a theoretical framework and methodological choice

an easy one for her to make and, as a novice doctoral researcher I needed her critical support to engage successfully with this alternative methodology:

> It means a lot to me that you are willing to accompany me on the 'complex' path I have chosen - so a really big thank you for that too (Email to supervisor, June 2016).

I argue that points of bifurcation such as this indicate an event where the outcomes of the choices made irreversibly changed the path of the research. Different choices would have produced very different outcomes. In Figure 3 I highlight the recursivity that occurred between reading of the literature and creating the methodological path. This recursivity between literature and methodology led to what I have identified as the fourth point of bifurcation; where I changed my understanding of the 'case' and subsequently my approach to developing my case study (see section 3.3.2).

I returned from my third leave of absence to find that I had a temporary supervisor. I handed in an almost complete draft of my thesis, aware that I had not 'persuaded' this person to the benefits of using business management literature alongside ECE literature, or of using a critical complexity methodology. My work needed to stand on its own and at that point in time it did not succeed in persuading the reader. Now I reflect back I think that a lot of the problem was to do with the structure of the work and I had not managed the 'messiness' of the research sufficiently to create a coherent account for the reader. The fifth point of bifurcation occurred in March 2017 during a discussion with my new, permanent supervisor. The experience of changing supervisors several times and the reaction to my first attempt at writing the thesis had shaken me and I was preparing myself to abandon complexity (and the business management literature if that was what was required of me). To my surprise, not only was he willing to accompany me on the complexity journey, he persuaded me that it "might be interesting". He also asked a question that unlocked the problem of messiness for me; "Do you need to have a literature review?"

My biggest stumbling block at that time was that I was trying to write following an 'introduction, literature review, methodology' convention. The

second part of the table in Figure 3 shows the trajectory of the order in which the chapters of the thesis were positioned. What it does not show is the content of those chapters. My first attempt at writing chapters one to four was completed in January 2016. I include the following feedback on my work to demonstrate the fact that even before adopting a complexity methodology I was trying to incorporate the historical context of the two-year-old FEL initiative and trying to consider quality from multiple perspectives. Particularly given the fact that at the time I was trying to follow a conventional mixed-methods methodology, I think that the feedback was very fair and supportive.

> Chapter two is probably a bit too long. I can see the rationale for its inclusion but I think it's a bit too descriptive and needs to be a section within your literature review under the heading policy context or some such like. In chapter three I am not convinced by the non educational discussion of quality. I fully appreciate you are very knowledgeable about TQM for example but I am not convinced it all fits here as the reader has to work really hard to make connections to the quality of provision for 2 year olds (Supervisor comments January 2016).

Between March 2016 and January 2017 the contents of the first three chapters were moved around several times and the content of what was to become Chapter Two: History disappeared altogether. Discussions of complexity moved between the introduction, the literature review and the methodology chapters and in each case it made the chapters extremely long and unwieldy. Making the decision to forego a conventional literature review opened up new possibilities. Notably it allowed me to form my own "path laid down in walking" (Montuori, 2008, p. xxxv) in order to manage the messiness of my research rather than trying to follow a prescribed or conventional route. Again I argue from complexity, that had a different supervisor been assigned to work with me, or had the same supervisor had a different response, it is likely that the outcome of my work would have been very different.

3.3.2 The use of cases

The use of cases to explain findings is employed in many methodological approaches (Chadderton & Torrance, 2011; Thomas, G., 2011) and raised two main questions for me. First, how is the use of cases compatible with a

complexity methodology? Second, what does a complexity methodology bring to the use of cases? Cases are a way of looking in depth at local, contextualised knowledge (Opie, 2004) and are not seen as a way of predicting future behaviour (Flyvbjerg, 2001). This is in line with a critical complexity sensibility and in some instances academics talking about case study for example, Chadderton and Torrance (2011, p. 54) use a lot of terminology that would also be used by complexivists, such as sedimentation of ideas and discussion of boundaries that include the histories and memories of institutions. Therefore it seems that the use of cases would be considered an appropriate method for my choice of methodology.

Byrne (2005, p. 98) cautions that methods from other disciplines should not be simply imported, rather, they should be reconstructed, that is, adapted to a complexity methodology. I trust that the following sections adequately demonstrate my efforts in that direction. First I discuss how and why I changed my approach to developing my case studies. I then go on to describe the process I used for analysis/synthesis. Finally I explain why I view the content of Chapters Four and Five as integral methods in my research.

My original research design was to produce comparative cases that were to be vignettes of a small number of parents and practitioners with potentially different views on quality for two-year-olds. There were a number of reasons why I did not follow this original design. The vignettes were to be co-written, or at least approved by the people identified as cases but an unavoidable time-lapse caused by an extended leave of absence on my part and movement of staff in schools during that period made that option problematic. Significantly, the original design became redundant because during the course of my inquiry I also came to perceive the 'case' in quite different terms. For example, as Byrne (2005, p. 105) states, "cases are in themselves complex systems which are nested in, have nested within them, and intersect with other complex systems". I took this to mean that I needed a method of developing cases that took this complexity into account unlike the 'stand-alone' cases I had at first envisaged. I also took notice of Thomas, G. (2011) who argues that novice researchers frequently make the

mistake of using cases to describe rather than to explain. He contends that although they identify the subject of their inquiry, they do not pay enough attention to the object; "the analytical frame or theory through which the subject is viewed" (p. 511) and thus what the case is exemplifying.

I revised the approach to developing my cases accordingly, taking instead my interpretation of Morin's dialogic approach, using some of the different understandings of quality from the ECE and the business management sectors as the analytical framework. The change of design impacted on what the cases are "cases of" (Thomas, G., 2011, p. 512). Rather than cases of people within the system and their potentially complex views on quality for two-year-olds, I now understand my case in a wider sense as a case of a specific phenomenon at a specific time; the implementation of the two-year-old FEL in one local authority during Summer 2014. The case is now presented through comparative examples (nested within the boundary of the system – the LA) of aspects of the analytical framework I am using. For example, cases of understandings of the purpose of education as exemplified by the preparations schools made to accept two-year-olds.

It is acknowledged that a criticism of case study (Chadderton & Torrance, 2011; Flyvbjerg, 2006), and indeed of a non-scientific complexity (Phelan, 2001), is that knowledge produced cannot be generalised and cannot be used for prediction. An understanding of critical complexity would refute the fact that this is ever possible in the social sciences and would argue that knowledge can only ever be local and contextualised. And yet this local knowledge can still be useful. I agree with Flyvbjerg (2001) that the use of cases is a good method to learn and develop expertise of real-life situations with all of its complexities. Not only is there the possibility for the reader to learn from the researcher's interpretation of the case but, as Flyvbjerg contends, cases can enable the reader to interpret the information from their own perspectives.

There are further benefits to using cases within research. For example, with particular relevance to my inquiry, is Chadderton and Torrance's claim that case-study is a useful way of investigating new policies and to "hold policy to

account in terms of the complex realities of implementation and the unintended consequences of policy in action" (2011, p. 54). A comparative method can also support researchers to "delve into complex causal processes" (Byrne, 2005, p. 96), and, I would add, treat them as complex. Case-study does not seek a universal truth or law that links all cases together, but is interested in the relationships between cases and the tensions between what links and what separates them. This correlates with Morin's advice to find a method of "disjunction-conjunction" (Morin, 2008, p. 6).

The purpose of using cases is to provide more than a description of the system. Drawing on the complexity concept of multiple routes to similar outcomes, Byrne (2005, p. 101) also talks about a complexity approach to case study being able to deal with "ensembles of systems" to show the multiple paths to the current state, and potentially multiple ways that things could be different in the future. Understood in this way, comparative case studies could be used, not to predict, but to recognise potential for change – not in terms of 'what works', but as Flyvbjerg (2006) suggests, in terms of what makes 'sense'.

3.3.3 Analysis/ synthesis – thinking in a complex way

It seemed appropriate to me that I should employ an electronic means of managing my research data and this correlates with Morin's encouragement to connect and separate, to analyse and synthesise. For me, the advantage of using an electronic database is that once I had manually ascribed participants and what they said to various categories I would be able to explore a much wider variety of connections and separations. For example, not only could I explore schools as cases but I could explore whether people in similar job roles or people belonging to a particular age-group or with similar qualification levels said similar or different things. Whilst it would be possible to do all of this manually, I felt that there would be a likelihood of confusion caused by too many pieces of information being manipulated, or of over-simplification if I tried to avoid the inevitable complications caused by an abundance of sticky-notes, highlighted transcripts and confetti-like interview clippings. I chose to use NVIVO for the very practical reasons that it was i)

available to me via the university, and ii) there was a comprehensive support package available to me for the duration of my research.

The first stage of analysis/synthesis was to transcribe the interviews in Summer 2014. By doing this myself I was able to become very familiar with the material and it was at this point that I found myself unconsciously categorising responses according to Garvin's (1984) categories of quality used in business management (see section 4.2.1). This exemplifies Morin's point about us being possessed by our environments and education (1999, p. 10). Because I recognised this was the case, when I started to analyse the data with NVIVO using open codes in early Autumn 2014 I made a conscious effort to categorise the data from what emerged (for example, statements that could be categorised as "two-year-olds are just like three-year-olds" or "two-year-olds are not like three and four-year-olds"). See Appendix 3 for a full list of the initial open codes.

I found that just as Thomas, G. (2011) advises, the analytical frame, or 'object' may not always be apparent at the start of the inquiry. He goes on to say (p. 514) that "it will be this analytical focus that crystallizes, thickens, or develops as the study proceeds" which I found to be true in my particular case. Unfortunately, family circumstances meant that I had to take a leave of absence and it was almost a year before I returned to the transcripts. I believe that this actually worked in my favour, as I was able to look with fresh eyes at those once very familiar documents. The distance afforded by the time lapse gave me the opportunity to employ Morin's meta-point of view and to use the different disciplinary lenses of ECE and of business management in a dialogic way (see 2.5.1). The first time I analysed the data I used open codes. When I returned to the data in May 2016 I deliberately separated the data according to Garvin's (1984) categories of quality (see Appendix 5). Then in a final iteration of the analysis process in January 2017 I considered analysing the data according to product, structural and outcomes categories of quality for ECE, but noted that the data it produced was very similar to the data collated under 'Product-based understanding' and 'Manufacturing-based understanding – Output quality'. Instead I undertook a further analysis of the User-based open codes (see Appendix 7 for an example of this). I did

this piece of work manually rather than using Nvivo because I wanted to include a lot of contextual information in each table to enable comparison regarding the roles, qualifications, experience and school setting of those making comments. The other piece of analysis I undertook using Nvivo was to open-code anything relating to the subject of early intervention (see Appendix 8). These understandings of quality will be discussed further in Chapter Four.

A further advantage of starting again with the whole transcripts was that it gave me the opportunity to compare how the same data was interpreted by me in different ways. For example, here is an excerpt from the interview with the EYFS Leader at Sycamore Primary:

> The other thing is because they're so language poor when they come in, we felt the earlier intervention the better…because that has to sort of, hopefully affect our results.
> (Jenny, EYFS Leader Sycamore Primary).

I originally coded the first sentence to the open-code "low levels of language". When I returned to the analysis in May 2016 I attributed the whole paragraph to "User based quality – needs of schools". As can be seen in this example, the emphasis of whose needs I had identified in my analysis had shifted from the child to the school. It also demonstrated to me that the smaller excerpts of interviews could be interpreted differently when separated from their original contexts. The experience of sometimes seeing things differently at a different point in time, or sometimes seeing things differently when they had been taken from their original contexts could be understood as an example of Morin's notion of the "inseparability of the separable" (2006, p. 16). This is because any separation of parts from wholes for the purpose of understanding phenomena is a matter of perspective and, as Human (2015) claims, another researcher could produce different findings with the same data.

This experience reminded me of my ethical duty towards my interviewees. The original design to produce stand-alone vignettes of individual people's views of quality for two-year-olds had changed to considering aspects of the discourse on quality based on contributions from multiple interviewees. It

was therefore no longer necessary or appropriate to follow my original design of developing the vignettes with the participants (which in some cases would have proved extremely difficult). Thomas, D. (2017) highlights issues related to conducting member checks later on in the research process, from participants' reluctance to become further involved in the research process to the possibility that at the later stage the understanding and opinions of participants may have changed. As my study is exploring the concept of quality as it related to two-year-olds at a very specific time and because there has been such a time-lapse between the interviews and the production of my findings, it appears to me that subsequent member checks would not be appropriate. However being aware of the possibility of distorting the data through the analysis process (separating it from its original context), and knowing that the interviewees would no longer be involved in a second stage of data production, I decided that a major part of the process would need to be a very careful re-reading of each separate interview transcript alongside any references I have made in my thesis for each person, to try to ensure that I have not misrepresented their thoughts and feelings as I understand them.

3.3.4 Mapping the history of the system

The development of cases often includes additional methods such as collection of documentary evidence from the research sites and/or researcher observation alongside interviews. Although my original research proposal allowed for that eventuality I came to the opinion that such methods would have been inappropriate for my critical complexity approach. Observing practice would not have been particularly helpful in terms of answering my research question about practitioner perceptions of quality in relation to two-year-olds. Further, to have asked for specific documentary evidence such as children's records of attainment, for example, using *Development Matters* (Early Education, 2012) or *Early Years Outcomes* (DfE, 2013a) documentation, or to have conducted structured observations such as the ITERS-R audit (Harms et al., 2006) would have prioritised specific views on quality, which is not my intention.

However, a criticism of case-study highlighted by Chadderton and Torrance (2011, p. 56) is that relying "on interview alone, can result in an overly empirisist analysis – locked in the 'here-and-now' of participants' perceptions". To overcome this problem of the 'here-and-now' Chadderton and Torrance (2011, p. 56) suggest a strategy of exploring "participants' memories and explanations of why things have come to be as they are". As I have already explained, these were new teams and it was a new initiative to offer places for two-year-olds. Nevertheless I still felt it was important to try to understand how the system was (and still is) moving from one state to another. According to Byrne (2005, p. 101), "The big question is how can we interrogate the local to understand how things have come to be as they are and how they might be made different". He argues that within a complexity methodology it is important to study the movement of the system and that "trajectories of systems are the histories of cases" (Byrne, 2005, p. 105). Therefore, in the following chapters I explore the history of how quality has been and is currently understood at different levels of the system. I start with influences from the wider environment and eventually narrow the focus to the boundaried cases of individual schools - aware that these influences can be indirect and complex.

3.4 Chapter conclusion

A critical complexity methodology attempts to look at issues from multiple viewpoints without necessarily agreeing with each one and tries to establish how different perspectives have been reached. One strategy is to look at issues from different or opposing viewpoints in what Morin (2008, p. 33) terms a "dialogic" way and in the case of this research involves using literatures from both the ECE and business sectors. Another widely accepted strategy employed within this methodology is that of tracing the history of different systems and themes in order to gain some perspective on how a contemporary view has been reached. It is a recurring approach that I use in my study. For example, in this chapter I have traced the history of my own research, in Chapter Four I trace the history of quality, how it is understood and used, and in Chapter Five I trace the histories of themes

linked to the two-year-old FEL initiative including the discourses surrounding disadvantage and school readiness. Viewed through the lens of critical complexity, my aim is to follow Cilliers' suggestion to gather snapshots of the system from different angles and then to "juxtapose, compare, make collages, combine them in sequences that develop a narrative, and thereby, in perhaps a more creative way, develop our understanding of the system" (Cilliers, 2002, pp. 80-81).

Perspective, time and context are important considerations within a critical complexity methodology. The 'case' of this research is one LA at a specific point in time within which four purposefully selected schools are situated. This methodological approach acknowledges that a different researcher would produce different findings in the same situation and that the same researcher would produce different findings at a different point in time. Therefore any conclusions can only ever be "modest" (Cilliers, 2005). Although parts of systems can be separated in order to aid understanding it is important to still recognise them as connected to their wider systems and to acknowledge that they can be influenced by other systems outside the artificial boundaries created as part of the research process.

The "inseparability of the separable" (Morin, 2006, p. 16) is a useful way of thinking about the part-whole relationships present in richly connected systems. Another 'inseparability' to be considered in this particular research is an ethical one related to conducting research in my own workplace. Rather than understand my position as a researcher being a binary 'insider / outsider' position, critical complexity helps me to consider my status in a more fluid way that can alter over time and therefore adds a temporal dimension to the problem of separating my professional role from my role as researcher.

The next two chapters are my personal attempt at providing a particular historical snapshot of the system. I deliberately chose to position them after my methodology chapter as I consider them to be functioning as an integral method of the research. Both chapters define the context of the different levels of the wider education system that interact with the school level

systems. Chapter Four explores how the concept of quality has developed in both education and business management contexts. I utilise the Morinian concept of dialogic method at the same time as attempting to follow Byrne's advice to trace the history or trajectory of a system. Chapter Five explores the background to the two-year-old FEL initiative and how the notion of quality might have been, and continues to be, framed for this age-group. By providing a historical context for my study, albeit limited by my positionality, my intention is to provide a lens through which traces of history might be discerned in the present day system. This chapter demonstrates that whilst it is important to attempt such a lens, any such exploration cannot provide a definitive key to unlocking understanding of the system, nor can it be considered neutral or value-free. Whilst Chapter Five is not intended to be dialogic in the Morinian sense, there is nevertheless an element of looping of ideas between the different chapters (an example of the inseparability of the separable in the research) through which my intention is to support the development of multiple snapshots of the system in order to "juxtapose, compare, make collages, combine them in sequences that develop a narrative, and thereby, in perhaps a more creative way, develop our understanding of the system" (Cilliers, 2002, pp. 80-81).

Chapter Four - Quality

In Chapter One I introduced the quote from the document *More Affordable Childcare* (HMG, 2013, p. 30) where the claim was made, "We know that the quality of provision is particularly important for disadvantaged children". Furthermore, it stated that LAs should only fund places for disadvantaged two-year-olds in settings that are judged by the regulatory body Ofsted to be 'good' or 'outstanding'. I then raised questions about what was meant by the term 'quality' in this context? What constitutes 'good' and 'outstanding' quality for two-year-olds? What aspects of the provision are 'particularly important for disadvantaged children'? How are decisions made about quality? And, moreover, who gets to decide? In this chapter I will consider some of the ways that these questions raise contentious issues depending on how the person answering views the purpose of education.

I begin by exploring the contested nature of the term quality and how its meaning can change depending on context, values, time and place. Then I move on to consider the arguments presented by notable protagonists in the Early Years 'Quality Debate' that are based around the question 'Who says what is quality?' I then explore different attempts to define quality in ECE, before looking at prevalent discourses on how to achieve quality, some of which I argue draw on business management practices.

In line with my chosen critical complexity methodology, in this chapter I attempt to produce a dialogic understanding of the concept of quality by exploring how quality has been understood over time from both education and business management points of view. In doing so I recognise that the connections present in open-systems mean that there are likely to be overlapping interpretations. My intention is to achieve a 'disinterested understanding' (Morin, 1999, p. 52) which I interpret as Morin encouraging researchers to be impartial and open-minded in order to better understand the rationales underpinning each position. By doing so and avoiding dichotomous thinking I believe that there is a greater chance for productive dialogue and to create new ways of thinking and acting.

4.1 Quality is a contested term

The term 'quality', generally assumed to be positive and desirable (Crosby, 1979), or at least necessary (Schwandt, 2012), has the distinction of being an extremely contrary concept. On the one hand it is so common-place that it does not typically invite interrogation and on the other, an understanding of quality is so subjective that if it was to be interrogated agreement concerning its definition would be difficult to reach. Penn (2011) claims that to investigate how quality in education is being understood by policy makers and in society, it is necessary first to understand the perceived purpose of education in a country. Interpretations of quality are also context dependent, varying according to cultural background as well as temporal context and geographical location (Woodhead, 1996). To further complicate matters, understandings of quality cannot be defined in a simple way because they are multiple, multi-layered and complex. Considered through a complexity theory lens it is possible to see how individuals with their many systemic connections, for example to family, work and the media to name but a few, are subject to multiple influences when it comes to understanding or defining quality. Within organisations there will also be multiple interpretations perhaps due to individual differences or to the demands of different job roles.

The notion of multiple understandings existing at the same time has been described by Pollitt and Bouckaert (2011, p. 8) who, when talking about public sector reform, likened the phenomenon to a "sedimentation" of ideas where the new ideas lay on top of the old, rather than a "wave" of new ideas that wash away the old and replace them. Fenech (2011, p.103) describes "three distinct and overlapping 'waves'" of research into quality and Vedung (2010) uses a wave metaphor to describe how four distinct types of evaluation practice (used to measure quality) have "deposited sediments" (p. 263). In all cases the implication is the same: the introduction of new ideas does not necessarily mean that old ideas are gone or forgotten either by individuals or within organisations. When writing about the archaeology of knowledge, Foucault (1989/1966, p. xxv) also recognised this "simultaneity" of ideas as well as "mutations" which he said were precursors to new ways of thinking. Again, using a complexity lens to theorise this phenomenon, it

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could be explained by the concept of feedback loops that I introduced in Chapter Two. This would be where new ideas that are not stifled by the system initially co-exist with old ideas until potentially a new equilibrium is found which may even exclude the old or the new ideas altogether.

4.1.1 The Quality Debate versus the Quality Movement

The "quality debate" is a term used to denote the contextual and subjective nature of definitions of quality (Nikel & Lowe, 2010). These perspectival definitions are frequently framed in opposition to more universal, measurable ways of describing quality that Nikel and Lowe (2010, p. 591) term the "quality movement". Whilst Nikel and Lowe's two distinct categories of understanding quality are useful for exemplifying differences in approach, at the same time it is important to remain open to the idea that the way that quality is understood and enacted in the education sector is much more complex. For example, in the English context, an extensive evidence-based literature review of research evidence on quality ECE for children under three years-of-age was carried out by Mathers, Eisenstadt, Sylva, Soukakou and Ereky-Stevens (2014a, p. 4) that made important recommendations about provision for two-year-olds just as the FEL initiative was being expanded. At a superficial level their research might be considered as belonging to the quality movement category as their findings identified aspects of process and structural quality which are commonly understood to be measurable aspects of provision (see further discussion of these broad definitions in section 4.2).

In terms of good quality pedagogy they highlight four process aspects of quality:

- Stable relaonships and interactions with sensitive and responsive adults
- A focus on play-based activities and routines which allow children to take the lead in their own learning
- Support for communication and language
- Opportunities to move and be physically active
  (Mathers et al., 2014a, p. 5).

In order to achieve high quality pedagogy they highlighted five conditions that need to be in place. Some of these could be described as structural aspects of quality and others suggest a combination of process and structural quality:

- Knowledgable and capable practitioners, supported by strong leaders
- A stable staff team with a low turnover
- Effective staff deployment (e.g. favourable ratios, staff continuity)
- Secure yet stimulating physical environments
- Engaged and involved families.
   (Mathers et al., 2014a, p. 5)

Whilst there may be methods of measuring the aspects of quality they describe, the act of evaluating quality, particularly the aspects of relational pedagogy they identify, would involve subjective as well as measurable judgements. Therefore I argue that the understanding of quality described by Mathers et al. cannot sit entirely within either of Nikel and Lowe's categories of 'quality debate' or 'quality movement'. Further, the nine aspects of quality described above are intended to be understood as interdependent parts of a whole. An understanding from complexity would expect that where these nine aspects combine in unique ways in individual settings for two-year-olds very different outcomes could be produced.

In contrast to the simple categorisation used by Nikel and Lowe, New Zealand researchers Dalli et al. (2011) developed a more complex interpretation of how multiple and layered understandings of quality might be categorised. They recognised the complexity inherent in separating definitions of quality when they reviewed a large body of literature relating to quality for children under two years-of-age and presented their findings as four overlapping categorisations of quality (see Figure 4). One of the categorisations included philosophical and cultural definitions of quality that form part of the 'quality debate'. Earlier, in the business management sector, Garvin conducted a literature review where he identified five separate categories of quality, the first being "transcendent" (1984, p. 29) which was also a perspectival view. This particular category was dismissed as not particularly helpful to business leaders as it could not be measured and depended instead on the subjective opinions of experts. My view from complexity leads me to believe that the rejection of subjective understandings of quality in business and industrial production has influenced some of the current understandings in the education sector.

Figure 4: Venn diagram showing how multi-perspectival aspects of quality for children under two-years old are presented within scholarly domains. (Dalli et al., 2011, p. 21)

Taking into account the notion of sedimentation introduced in the previous section, of feedback loops and the ecology of action (see 2.4.1) I think it unlikely that understandings of quality could ever be so clearly separated into two opposing groups of perspectival and measurable understandings of quality. I would argue that even the concept of a continuum is too linear an image for the messy reality of how quality is understood in education. Instead, I believe that Dalli et al.'s (2011) Venn-diagram (Figure 4) offers a better representation of how ideas of quality co-exist. The idea of overlapping dimensions correlates with ideas introduced above of multiple influences and layered understandings.

In this section I want to introduce two notable writers who have made contributions to the philosophical debate on ECE quality. Both Katz in the United States of America and Moss in England have taken a perspectival view on quality which has the effect of asking 'Who gets to say what quality is? Their long-standing critiques provide a useful way of probing this question from different angles. Katz views the quality discourse as helpful but argues for a broader understanding that incorporates multiple perspectives, whereas Moss argues that the discourse of quality in education comes from the very limited perspective of those in power and is therefore unhelpful.

Katz (1993, pp. 5-6) focuses on the different stakeholder groups attached to an organisation; children and parents, staff working in the early years setting, and those outside the establishment who represent the wider society including funders. She highlights the tensions between different perspectives such as "Outside-Inside" as well as "Top-down" and "Bottom-up" perspectives of managers as opposed to practitioners, and she particularly calls for the need to include the experiences of children and to create a more balanced viewpoint. Katz was writing at a time when the 'Rights of the Child' agenda (UNICEF, 1989) was being widely debated and where ECE academics and practitioners were particularly looking at how Article 12 of the Convention, that considers the views of the child, might be implemented in practice.

At a similar time in the English context there was a growing interest in concepts such as listening to children's voices (Clark, 2004) and to children's participation and their involvement in decision making (Clark, McQuail & Moss, 2003). The idea of the child as a service-user or stakeholder; a competent, capable learner with individual needs and interests that should be taken into account, has since become a recurrent theme in ECE including the guidance produced by successive governments in England in the last twenty years. For example, one of the principles underpinning the *Birth to Three Matters Framework* (Sure Start, 2002) under the New Labour Government, is that "Children learn when they are given appropriate responsibility, allowed to make errors, decisions and choices, and respected as autonomous and competent learners" (p. 5). Several changes of government later, the need to understand and follow children's individual needs and interests is still enshrined in the *Statutory framework for the early years foundation stage* (DfE, 2017b) and is recognised as an essential aspect of quality teaching in the early years (Ofsted, 2015b).

However, taking account of user-based views is not the sole property of those with a perspectival or critical understanding of quality. Those taking a more scientific, objectivist approach to understanding quality have taken the same ideas on board but used them to different ends. This reflects the approach used widely in business and particularly service industries where

product features (aspects of the service that have been identified as important to the customer) are measured to evaluate the effectiveness or quality of the service in question. This approach also places responsibility with the customer for evaluating the quality of a service for example in choosing whether or not to remain a customer. In education this type of thinking is at play within the strategy of market-based accountability whereby competition between settings when parents select schools for their children is intended to stimulate quality improvement within the system (Allen, Burgess & McKenna, 2014).

With reference to the two-year-old FEL initiative and the question, 'Whose needs should be met?' the impact of a potential lack of consensus about quality between different stakeholders who occupy different positions within an organisation or system (such as children, parents, leaders and practitioners) could be that it makes effective communication difficult. This issue of lack of consensus between parents, providers, local authorities and central government was highlighted by Mathers, Singler and Karemaker. (2012), in relation to how quality is defined, in the language used to define it, how it is measured and the purposes for which it is measured.

In the business context, Seawright and Young (1996, p. 107) argue that where there are different ideas about quality resulting from differently perceived needs (or purposes) this could produce "a mismatch of [the] quality expectations". Bringing the argument back to ECE, an example of this could be where a parent may have a different interpretation of quality to a teacher, a headteacher or an Ofsted inspector. Whilst Seawright and Young (1996) claim that different interpretations may be valid at the same time, in ECE the impact of judgments about the quality of provision could have very different outcomes depending on who has made them. A parent may simply decide not to use the service offered if it is perceived to be poor quality, but if an Ofsted inspector made that judgment the result could have serious consequences for the school or setting. It is for this reason that enormous attention is paid by ECE providers on ensuring that robust evidence can be provided to prove that they meet Ofsted's expectations of quality. Which brings me to my question about how decisions are made

about what constitutes quality and who gets to decide? Clearly there is an issue of power here in terms of which voices are going to be heard and taken notice of.

4.1.2 Engaging (or not) with the concept of quality

In their seminal book *Beyond Quality in Early Childhood Education and Care - Postmodern Perspectives,* Dahlberg, Moss and Pence (1999) also make the case that understandings of quality are subjective. They claim that to understand what is meant by quality you must first understand how childhood is being understood as well as the purpose of education. They develop a Foucauldian analysis of the term 'quality', arguing that the discourse of quality functions to enforce a form of disciplinary power involving normalisation practices and regimes of truth that legitimise particular knowledge and practices. They argue, "Discourses are also not just linguistic, but are expressed and produced in our actions and practices, as well as in the environments we create" (Dahlberg et al., 1999, p. 31). Understood in this way, the discourse of quality does not only shape the way we think, but also the way we act. Presumably then the way we act can then shape the way we think which, in complexity terms, Morin (2008) explains as feedback loops that react and retroact.

Moss (2014) has continued to question the notion of quality throughout a long career and argues that there are two dominant discourses that he refers to as "the story of quality and high returns" (p. 3) and "the story of markets" (p. 49). The first story refers to the discourse surrounding early education and early intervention strategies that are positioned as a cost effective means for reducing future welfare costs and improving social and educational outcomes (particularly for 'disadvantaged' children) and a way to remain competitive in the global economy. The second story of markets is one that is also dominated by what Moss refers to as neo-liberal concerns; competition, customer choice and efficiency. He highlights what he sees as a worrying turn where childcare businesses are being seen more and more as potential sites of wealth production and profitability and the ECE sector is being increasingly managed following business methods. I will be returning to the arguments about the influence of business practices on the ECE

sector later in this chapter. However, now I wish to focus attention back to the question, 'Who says what is quality?' and the impact of power on the ability of minority voices to be heard.

Much of the evidence underpinning arguments for investment in ECE is based on some dated and relatively small scale research carried out in very specific and localised contexts (Moss 2014; Campbell-Barr, 2012) and the vast majority of research into 'quality' is generated in the United States of America (US) context (Fenech, 2011). Moss (2014) challenges the lack of diversity in the stories being told about ECE and the fact that the dominant story of quality and high returns is being presented as an objective and uncontested truth; in effect, the only story to be told. He highlights the way that findings from neuroscience have particularly influenced this story as well as very simplified understandings of concepts such as Human Capital Theory (see Moss 2014, pp. 19-25). Nevertheless, the simplified messages are frequently repeated and the research has been taken, de-contextualised, and dispersed globally.

"Neurobiology and child development" are another of Dalli et al.'s dimensions of quality (2011, p. 21). The influence of neuroscience on government education policy started to be apparent in the US context in the late 1990s (Edwards, Gillies & Horsley, 2015; Gopnik, Meltzoff & Kuhl, 1999) and in England in the early 2000s (Lowe, Lee & Macvarish, 2015). Influential documents in the English context, also referred to by Moss (2014), include the independent reports to Government on early intervention (Allen, 2011a; Allen, 2011b) and on poverty and life chances (Field, 2010). Each report makes reference to studies by the American psychologist Bruce D. Perry, including images of normal and extremely neglected three-year-old children's brains (Perry, 2002) that are displayed prominently on the front covers of both Allen reports. It could be argued that the use of such images is deemed beneficial by policy makers when promoting their preferred policies because the images are memorable and persuasive.

Abi-Roched and Rose (2010) argue that some of the more compelling messages chosen to be repeated by politicians and policy makers are based

on neuroscientific research and are frequently used to substantiate arguments about early intervention strategies. They make a similar Foucauldian based claim to that of Dahlberg et al. (1999) mentioned above. In this case they argue that the discourse of neuroscience enforces a mode of disciplinary power that has us live increasingly under a "neuromolecular gaze" (Abi-Roched & Rose, 2010, p. 12). Here they are referencing Foucault's theory of governmentality (Foucault, 2010/2004) as they perceive the rise of neuroscience as instrumental in the way populations are kept under surveillance and are managed.

Neuroscientific arguments generally come from a reductionist, scientific stance and can imply value-free and scientific truths (Cooter, 2014; Moss, 2014). It is the way that the messages are given, as absolute truths and which are so often distilled and distorted far from the original source material (Meloni, 2014) that means that the messages can alter like a form of Chinese whisper. In combination these two aspects of i) frequently repeated messages and ii) the claims based on neuroscientific findings being presented as undisputed truths, can produce a normalising effect (Cooter, 2014) and have a significant, and arguably disproportionate, impact on the way quality is understood in the ECE sector.

I argue that, compounding the impact of neuroscientific arguments, there are other frequently reported findings based on 'typical' child-development measures that sit alongside, interact with and support the case for early intervention. For example, *The Early Catastrophe* (Hart & Risley, 2003) and the English 1970s cohort study (Feinstein, 2003) highlighted differences in outcomes between children from lower and higher socio-economic-status backgrounds, and the American High Scope Perry Pre-school Project (Schweinhart, 2003) provided a cost-benefit analysis of early intervention for disadvantaged children. Even though the statistical findings of the last two studies have been contested (Jerrim & Vignoles, 2011, Heckman, Moon, Pinto, Savelyev & Yavitz, 2010), sound-bites from each have been selected and continuously repeated. This strategy results in a popular impression of truth being told (Edwards et al., 2015; Dechêne, Stahl, Hansen & Wänke, 2010). It is what I believe Moss (2014, p. 25) is referring to when he

expresses "incredulity" about the 'stories' surrounding the ECE sector and early childhood and encourages readers to challenge these powerful discourses or at least to acknowledge that there are other viewpoints that could be taken.

Complexity theory can provide an explanation for the way in which these messages about quality have swamped the social system we inhabit and how other ideas about quality appear to have decreased in volume. In section 2.4 I introduced the concept of complex adaptive systems and Morin's (2006) explanation of significant change occurring when deviations in the system are allowed to develop and grow. Wheatley (1999, pp. 22-23) discusses this phenomena as the concept of "strange attractors" where systems inherently create order from apparent chaos. Understanding these frequently repeated messages as strange attractors can help to explain how such messages about quality have multiplied. Also, as the messages become more distilled and distorted from their origins, and are accepted and subsequently repeated without scrutiny of the original sources and any real understanding of the values and principles underpinning them, it becomes easier for them to travel in feedback loops through different layers of social systems and further increase. Following the logic of complex adaptive systems and their movement towards stability it is entirely possible that other views of quality such as those of the quality debate could be lost from the system.

Whilst I agree with Moss (2014) when he argues that there are other stories to be told about quality, my understanding of complex adaptive systems means that I believe an either/or logic will necessarily result in the dominance of the now powerful 'quality movement' over the now reduced 'quality debate'. Instead, I believe that using a both/and logic it could be possible to find a new stability. My understanding of complexity theory leads me to believe that the way to slow the progress of this particular 'strange attractor' is not to try to stop one discourse and start another. Rather, it is to promote an impartial or "disinterested understanding" (Morin, 1999, p. 52) of alternative views on quality, thereby reinforcing the notion that there *are*

multiple views and thus opening the possibility for different approaches to be taken. The next section is a contribution to such a process.

4.2 Defining quality in education

In contrast to the 'Who says what is quality?' approach there are academics who have wrestled very differently with the notion of quality and in order to differentiate between 'high' and 'low' quality in ECE settings they define aspects of provision and practice that they believe are key factors in producing quality. From this viewpoint, once defined and isolated, the aspects of quality can be measured objectively thus producing a more scientific approach to understanding, measuring and improving quality. Melhuish (2001) discusses three waves of research into the quality of ECE and argues that multiple perspectives of research into quality can all be valid so long as the values underpinning the understandings of quality are explicit. That is the theory, but it raises questions about how objective measures can really be and the concept of the 'inseparability of the separable' helps to raise further questions such as whether it is possible to isolate one aspect of quality from another.   Further, even if values underpinning interpretations of quality are made explicit in ECE research, dissemination tends to focus on findings and not on how they were reached (Fenech, 2011). This is where I argue that some of the taken-for-granted assumptions about quality can evolve.

There are three broad dimensions of quality that are frequently highlighted in the ECE context; 'structural quality', 'process quality' and quality of 'outcomes' (e.g. Dalli, 2014; Singler, 2012, Munton et al. 2002). Structural quality includes staff qualifications and group size. These aspects tend to be considered as unambiguous measures which can easily be used as part of regulatory processes. Process quality includes pedagogy and relationships. When measures are attempted they usually involve observation and therefore are subject to bias (although this may not always be recognised). Finally, quality of outcomes tends to focus on typical expectations in terms of child development. Measures are often described as impact measures and

are considered to be the result of the combined impact of structural and process quality.

Although often presented as objective measures, I argue that there is no aspect of defining or assessing quality that can actually be value-free. The very act of choosing what to measure is value-laden, as is the subjective stance of the assessor. Also, as I suggested earlier, there can be multiple influences at play when describing or measuring aspects of provision and practice. Throughout the remainder of this section I consider structural, process and outcomes dimensions of quality, particularly in relation to provision for two-year-olds. Where appropriate I juxtapose the understandings from ECE with business understandings of quality. My complexity viewpoint would anticipate multiple and layered understandings of quality being present at the same time. Singler (2012) acknowledges that the three dimensions of quality are sometimes used in combination for the purposes of regulation, research and quality improvement practices and she positions such combination as a matter of preference. In contrast to Singler's position, as this section of the chapter progresses I hope it will become evident that to consider any of these aspects of quality in isolation would prove extremely difficult. Elements of structural, process and outcome dimensions of quality are woven throughout the following example, demonstrating the complexity of overlapping, sedimented understandings. I focus on the workforce, an aspect of provision and practice that has been identified as important to the quality of provision for young children and to do so I critique the Nutbrown Review. This was a government commissioned review, designed to be digested as such by policy makers, and therefore I recognise that it is constrained by the discursive frame within which it was produced and does not necessarily represent the full views of its author.

4.2.1 Workforce 'quality' and the 'quality' of qualifications
In *Foundations for Quality. The independent review of early education and childcare qualifications . Final Report*, Nutbrown (2012) makes the claim that "The biggest influence of the quality of early education and care is its workforce" (p. 14) which could be interpreted as an understanding based on process quality. However, she also claims that "When we talk about the

'quality' of staff, their qualifications are key" (p. 15). Levels of qualification are an example of structural quality. In her review Nutbrown describes what she believes to be the essential elements that need to be included in a 'quality' qualification route both in terms of course content and delivery, essentially talking about the structural *and* process aspects of the qualifications. So, with these two examples; practitioners and qualifications, it is already evident that trying to separate structural and process understandings of quality could be problematic.

Nutbrown's discussion of ECE qualifications uses several other constructs of quality. First, she refers to the 'quality' of certain qualifications as a way of offering a trusted standard; what might be described as a kind of badge of quality to give a parent or prospective employer "confidence" (p. 18) that they are getting the services of a high quality practitioner. Children can access two-year-old FEL places in any setting whether it is in the school or private and voluntary, PV sector, as long as it has been rated as 'good' or 'outstanding' by Ofsted. At a very basic level the Ofsted rating is also functioning as a badge of high quality and Nutbrown (2012) herself uses the same Ofsted rating criteria when she argues that students should only have placements in high quality settings – those rated as 'good' or 'outstanding'.

In the review, Nutbrown (2012, p. 5) claims that qualifications of a suitable quality would have "depth and rigour" and produce "consistent" outcomes. This understanding of qualification based quality clearly stresses the superior aspects of the training (that the qualification will not be too easy to achieve and will be challenging) whilst also stressing the quality of the qualification itself in terms of consistency and reliability. This implies practitioners who have been accredited through this qualification process are more likely to display high quality attributes and so this additional function of the term quality is in effect to promise a kind of trusted brand. There is a further construct of quality used when Nutbrown (2012, p. 8) refers to the "efficient and effective investments in the future of the youngest in our society" which employs a version of quality meaning getting value for the amount of money spent. She goes on to claim that getting "the best from the substantial investment in early education can only be achieved if we significantly raise

the quality of the early years workforce". It could be argued that this last construct of quality in particular might be deemed likely to make sense to and therefore appeal to the review's intended audience of policy makers.

These different uses of the term quality, which I believe are typical in education, first emerged in the context of business management where quality improvement is seen as a means of reducing costs and improving profitability. Garvin identified the ways that quality had been defined in (non-education based) academic literature and sorted them into five categories; transcendent, product-based, user-based, manufacturing-based and value-based (1984, p. 29). Nutbrown's different uses of the term quality align closely to some of Garvin's categories:

- a 'product-based' understanding of quality; the notion of quality being where consumers are able to trust products manufactured using raw materials of a superior standard. In a similar way Nutbrown uses qualifications to represent a kind of trusted brand where some qualifications with better 'ingredients', promise higher quality child outcomes than others.
- a 'manufacturing-based' understanding of quality where outcomes or products consistently meet required standards. This understanding aligns with Nutbrown's discussion of the need for consistency and reliability of qualifications.
- a 'value-based' understanding of quality; getting the best product or outcomes for the money available. This aligns with Nutbrown's comments about the need for investments in young children to be "efficient and effective" (2012, p. 8).

Links between business management and management of the education sector have long been established (Head & Alford, 2015; Junemann & Ball, 2013; Segerholm, 2012; Lawn, 2011; Hartley, 2010; Vedung, 2010; Lapsley, 2009; Gerwirtz, 2000) and so it should come as no surprise that understandings of quality and quality improvement methods used in business have been adopted in the education sector – maybe without it always being recognised. As has already been suggested, and as exemplified in my

interpretation of Nutbrown's review, many ways of thinking about quality and methods of implementing improvements have left sediments over the years to the point where there are now multiple understandings with different origins co-existing within the education sector. It has led to a situation where use of the term 'quality' is so commonplace that it is frequently used as a kind of shorthand within communities of practice with the expectation that the meaning behind the term is understood by everyone. However, where those communities of practice interact with other parts of their own system and beyond, a "mismatch of [the] quality expectations" such as was described by Seawright and Young (1996, p. 107) could occur. In the next section I raise the possibility that this may have happened with regard to the interpretation of the term 'teacher' in relation to two-year-old provision.

4.2.2 Is a teacher a 'high quality' practitioner in relation to two-year-olds?

Compared to all other aspects of structural and process quality, early years practitioners are said to have one of the strongest influences on the quality of provision because of their role in creating the learning environment and then supporting children's learning within that environment (Jones, 2014; Nutbrown, 2012; Dalli et al., 2011). Mathers (2012) claims that this understanding of the important role of practictioners is held by parents, providers and local authority personel alike. I highlighted in the previous section that qualifications are considered to be of key importance when considering practitioner 'quality'. However, there are conflicting ideas about the impact of having more highly qualified staff working with two-year-olds.

It has been argued that more highly qualified staff focus more on interactions and language development and on curriculum and academic progress (Gambaro, Stewart & Waldfogel, 2013; Mathers et al., 2007). Teachers are specifically reported to have a positive impact as "pedagogical leaders" (Mathers, Roberts & Sylva, 2014b, p. 24). A counter argument made by Owen and Hayes (2010) and Nutbrown (2012), is that current teaching qualifications in England do not provide suitable preparation for working with under-threes who have different needs to older children. It has also been suggested that what may be more important than having a higher

qualification could be the opportunity practitioners have to reflect on theory and practice either in the workplace via opportunities such as supervision and coaching (Mathers et al., 2014b) or outside the workplace via opportunities such as working towards higher qualifications (Karemaker, Mathers, Hall, Sylva & Clemens, 2011). What these arguments suggest is that when talking about the ECE workforce, relying on qualifications alone as a measure of quality is not enough; an understanding and experience of working with younger children is important too (Georgeson, Campbell-Barr, Mathers, Boag-Munroe, Parker-Rees & Caruso, 2014).

With particular reference to two-year-olds Nutbrown asserts:

> We must be certain that the two year olds receiving the free entitlement are experiencing early education and care of the highest quality possible. This must come from talented, sensitive people with the appropriate skills, knowledge and attitudes to support young children's learning and development through exploration and play, and to work with their families. They must do all they can to ensure that the significant investment leads to the anticipated benefits.
> (2012, p. 12)

This short statement demonstrates the influence of all three dimensions of measurable quality; structural, process and outcomes-based. It also indicates an influence of value-based understandings of quality. It is a statement that I would find difficult to disagree with because, as someone who is steeped in early years pedagogy, I think I know what it is that Nutbrown is saying, what she means by 'the highest quality', by 'appropriate' and by terms like 'play'. However, it is worth considering how the same statement might be interpreted by someone who has not got an early years background, for example, some policy makers or headteachers and whether they would be able to accurately interpret the same shorthand messages that were intended about quality.

The head of Ofsted, Her Majesty's Chief Inspector, Sir Michael Wilshaw made the following statement about two-year-olds in schools:

> What children facing serious disadvantage need is high quality, early education from the age of two delivered by skilled practitioners, led by a teacher, in a setting that parents can recognise and access. These already exist. They are called schools.

(Wilshaw, 2014, p. 7)

Two years earlier Nutbrown (2012, p. 14) proposed the new title of "Early Years Teacher" to mean a practitioner who has Qualified Teacher Status (QTS) *and* specialist early years knowledge of the full 0-7 age-range. In her review Nutbrown (2012, p. 8) made a case for graduates to be leading practice in order to "raise the status of the sector, increase professionalism and improve quality". Her argument was based on findings from the *EPPE Project* (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2004b), the *Evaluation of the Graduate Leader Fund* (Mathers et al., 2011) and research on the *Quality of Childcare settings in the Millennium Cohort Study* (Mathers et al., 2007) that all reported the quality of provision to be higher in settings where there was a graduate practitioner, particularly teachers and practitioners holding the Early Years Professional Status (EYPS). Again, Morin's concept of the ecology of action (2006, p. 21) is pertinent here (see section 2.4.1). It is possible that Wilshaw was influenced by Nutbrown's argument about teachers being better practitioners to work with young children but, if this was the case, it is equally possible that there was a mismatch between their constructions of the concept of an early years teacher. Further, even if Wilshaw shared Nutbrown's vision of an early years teacher, it is worth questioning how early years practitioners and school leaders interpreted his message about teachers working with two-year-olds.

4.2.3 The relationship between staff-child ratios, staff qualifications and group-size – implications for two-year-olds

Just having highly qualified practitioners will not guarantee better outcomes for children, or indeed improved educational results for schools. The variables of group-size and staff-child ratios also interact with qualification levels in a complex way such that it would be difficult to separate them in terms of impact (Mathers et al., 2014b, p. 23). In combination these features have a direct influence on how childcare and education provision is experienced by children, for example, on "the ability of staff to provide sensitive, responsive care for children" (Munton et al., 2002, p. 105), which is claimed to be an essential factor in supporting children's brain development and executive functioning skills (Centre on the Developing Child at Harvard

University [CDCHU], 2016). The impact of each variable is not just dependent on the other variables but is also context dependent and leads to different outcomes. For example, Mathers et al. (2011, p. 48) claim that staff experience and ratios have more impact on nurture and the quality of care routines, and that staff qualifications impacts on curricular quality. Therefore, following this rationale it might be argued that, at school level, the purpose(s) underpinning the decision to admit two-year-olds (i.e. what the school wants to achieve) would not only have an impact on the way the school chooses to organise the provision in terms of the qualifications, experience and staff ratios, but those organisational choices may also have an impact on the outcomes for children.

There are conflicting opinions about the impact of group size on the quality of provision. Smaller groups are said to provide better opportunities for positive interactions and care giving (Munton et al., 2002; Burchinal et al., 2000). Whilst Mathers et al. (2014a, p. 23) recognised that the evidence on optimal group sizes is difficult to establish "because optimum staff-child ratios and group sizes vary according to the aims and focus of the provision", in their review of the literature they argue nevertheless that for two-year-olds "Best available evidence suggests that groups should comprise no more than 12 children" (p. 7). In contrast, Mathers et al. (2007) argue that larger group sizes, and therefore larger spaces, allow a wider range of activities and experiences to be continuously accessible. Where two-year-olds are integrated with older children (suggesting larger group-size) it has been claimed that they make better progress, but that they require significant support from adults (Ofsted, 2015b). However, it could be that it is not the group size on its own, but the affordance the smaller group size, or the close support within larger groups, give to developing attuned relationships which is said to be so important for making a difference for 'disadvantaged' children (CDCHU, 2015).

The discussion above indicates that contextual factors impact on the variables of ratios, qualifications and group-size in a complex way. Morin's concept of the inseparability of the separable (2006, p. 16) is a useful way of thinking about the complexity involved in considering the separate and

combined impact of different contextual variables in ECE provision. Even though a boundary might be created around the variables of ratios, qualifications and group-size, a critical complexity understanding of systems suggests that phenomena outside the research boundary also have the possibility of impacting on the research object. The concept of emergence (see section 2.3) can also be used to theorise the unpredictable nature of quality in ECE provision because the greater the number of variables that exist in a system, the greater are the 'choices' or paths that might be taken at points of bifurcation (Capra, 1997). Therefore following a critical complexity sensibility, any findings about the relationships between the three variables identified here could only ever be modest and need to be considered within their individual contexts.

Although in many examples of ECE research it is acknowledged that understanding quality is complex because of the number of variables involved (e.g. Mathers et al, 2014a; Gambaro et al, 2013, Cleveland, Forer, Hyatt, Japel & Krashinsky, 2007; Mathers et al, 2007.), managing that complexity is frequently attempted within a positivist paradigm and would be considered under Dalli et al.'s category of "effectiveness studies" (2011, p. 21). In some research such as the EPPE study, effort is focused on identifying, isolating and "controlling for" variables via complex statistical calculations in order to establish the impact of an individual variable (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart (2004a, pp. 23-24). Another frequently used approach is to attempt to cancel out the impact of variables by conducting randomised controlled trials.

Effectiveness studies follow models first introduced in Medicine (Hargreaves, 2003). As 'evidence-based' research studies, they aim to understand how identified aspects of quality are produced and could be replicated and, since the late 1990s have been the preferred mode of research funded and distributed by research councils and policy makers in both English and United States of America contexts (e.g. Economic and Social Research Council, 2016, p.16; United States Congress, 2002; Education Endowment Fund website). For example, the first stated aim of the DfE's approach to research in a paper entitled *Early Education and Childcare. Research*

Priorities and Questions (DfE, 2014, p. 3) is to "promote the importance of robust quantitative evidence, in combination with other methods, to increase understanding of 'what works' in education and children's services". Such studies generally consider two aspects of effectiveness: how well strategies perform, for example, in terms of improving children's outcomes, and 'cost-effectiveness' - whether those strategies provide value for money (Haynes, Service, Goldacre and Torgeson, 2012, p. 5). Supporters of the approach claim that evidence-based research is scientific (RMC Research Corporation, 2006), and as a result it is unambiguous, unbiased and generalisable (Haynes et al., 2012). I argue that with its emphasis on economics and scientific methods the 'What works' approach is positioned as 'efficient' and 'business-like' and the value-based assumptions underpinning the approach may not always be considered.

4.2.4 Employing staff with different levels of qualification - efficiency as an expression of quality

The term 'efficiency' refers in part to the ongoing costs of producing quality outcomes. Cost reduction and efficiency have been a focus of government departments particularly since the introduction of New Public Management strategies in the 1980s and following that the Gershon Review of public services (Gershon, 2004), where the New Labour Government aim was to make management of the public sector behave more like management of the private sector. In business management quality improvement is seen as a means of reducing costs and increasing profitability. In education this would be translated as reducing costs and improving something else that is valued when profit is not a factor, which brings the issue back to the quality debate and who gets to say what is quality? In terms of ECE provision for two-year-olds, one way of reducing costs would be to change the statutory staff-child ratios so that each practitioner is responsible for a larger number of children. However, following Government suggestions to change staff-child ratios in line with other European countries (DfE, 2013b), it was found that the ECE sector in England had no appetite for such changes and so other cost-saving avenues or ways of improving the efficiency of the system have been explored.

Efficiency within the business sector generally means a focus on reducing waste in the system and getting the best outcomes with the resources available. Since the post second-world-war period efficiency has been discussed in business management communities as the 'cost of quality', concentrating on reducing waste in the system and getting things right the first time, thereby reducing the cost of reworking or repairing products. Crosby (1979), an American early writer on quality, famously declared that "Quality is free" meaning that although producing a higher quality product might be expensive, any additional cost is cancelled out by the potential cost incurred of producing poor quality products; the repair costs, time, inconvenience and loss of reputation. Traces of this type of thinking can be seen in the cases made for early intervention strategies. For example, in the UK context, an economic argument for early intervention was made graphically on the front cover of the report *Early Intervention: Smart Investment, Massive Savings* (Allen, 2011b). Here the image of one gold bar as the cost of early intervention was set against nine gold bars representing the potential future cost to the State, including amongst other things the cost of low attainment, poor parenting, poor mental health and violent crime. For educational leaders this might suggest a strategy of employing practitioners with higher qualifications for this early intervention work, even though they cost more to employ. The potential flaw in this strategy, as discussed in the last section, is that not all higher qualified staff have equal experience and understanding of working with under-threes and this could impact on how children experience the education and care and the kind of child outcomes produced.

There is another understanding of the term 'efficiency' that has perhaps become more prevalent since austerity measures were introduced in 2010 by the Coalition Government and have continued since, and that is the notion of 'efficiency savings' which hope to achieve value for money *and* cut costs. With specific reference to efficiency savings in education, the DfE (2010c) produced a guide for schools that highlighted ways that schools should consider cutting costs, for example, by introducing better procurement measures and changing the way that staff are deployed.

The English *Statutory framework for the early years foundation stage* (DfE, 2017b) sets out qualification requirements for maintained sector nursery provision that are different from all other types of nursery provision and this has a number of potential consequences for providers and for children. For example, the different requirements impact on the permitted adult-child ratios (DfE, 2017b) and potentially on the suitability and effectiveness of adults working with children (Gambaro et al., 2013; Mathers et al., 2007). Furthermore, because there are different pay structures in place in maintained sector schools, free-schools and academies and in the PV sector, there are differences in the cost of providing childcare in each sector (DfE, 2015) and different sectors therefore have different choices available to them

The first choice a school leader might face is over the staff-child ratio to use for children who are still accessing the two-year-old FEL funding but have turned three years-of-age. For two-year-olds the ratio of 1:4 is the same across all sectors, but as soon as children turn three there can be a lower ratio of adults to children; 1:13 where there is a practitioner with Qualified Teacher Status (QTS), Early Years Professional Status (EYPS) or Early Years Teacher Status (EYTS) and 1:8 where there is no suitable graduate present. This is relevant because children eligible for two-year-old FEL places have their third birthday during their last term of entitlement and so providers can elect to operate lower adult-child ratios at this point which could impact on the children's experience.

The second choice is around staffing structures, qualifications of staff working directly with the two-year-olds, and the subsequent staffing costs. There are different qualification requirements for each sector (DfE, 2017b). In maintained sector nurseries and nursery classes the expectation is for provision to be led by a practitioner with QTS. Free-schools and academies do not have to employ teachers with QTS and so they are subject to the same ratio expectations as set out in the statutory guidance as the PV sector. They can employ practitioners with EYPS or EYTS, enabling lower ratios without the need to adhere to teachers' national pay-scales, thus offering the potential of bringing down the unit cost of providing places (DfE,

2015, p. 50). Wilshaw (2014, p. 5) made reference to teachers leading practice and being accountable for children's outcomes which could be interpreted either as working directly with the two-year-olds and leading by example, or being responsible for the management of the two-year-old provision and directing the work of the practitioners working with two-year-olds. These different working arrangements of graduate leaders could also have very different outcomes.

It appears that there is a potential tension for school leaders between the two different understandings of efficiency I have described. On the one hand schools are being urged to engage in early intervention (partly in order to save the Government money in the future), even though offering provision for two-year-olds is not an obligation. On the other hand they are being required to make efficiency savings; to produce the most effective outcomes for the least amount of money possible. This suggests the need to employ strategies that find the best balance, or compromise, between outcomes and costs. In reality any such strategies are also likely to be complicated by contextual factors such as the values of individual leaders, the financial security of the school and any pressures to improve results further up the school. Set amongst these considerations is the expectation that schools are accountable in terms of their financial management to the Education Funding Agency [EFA] whose recent annual report (EFA, 2017, p. 9) stated that one of its purposes is to "provide assurance on the proper use of funds we distribute and intervene where public funds are at risk". Therefore, in circumstances where schools are facing deficit budgets the potential threat of receiving a financial notice to improve along with its attendant consequences would, I suggest, have an impact on how school leaders configure their staffing arrangements. The impact of monitoring arrangements could mean that school leaders feel that they have little choice in how they design their school's curriculum and staffing structures and in complexity terms this could be explained as a case of complexity reduction (see section 2.4.2).

4.2.5 Measuring quality - durability as an expression of quality
Finally in this section, I want to discuss another early definition of quality that has endured and which is linked to the notion of the cost of quality.

Durability as an expression of quality is a product-based understanding and focuses on how long a product lasts before it breaks down and needs to be repaired or replaced (Garvin, 1984). Here, in order to determine whether something is of 'high' or 'low' quality, features of materials or ingredients used to make a product are identified and compared. I argue that the notions of durability and comparing the features of different 'product' variables are highly evident in the *Effective Provision of Pre-School Education (EPPE) Project* (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2004a), an English longitudinal study following 3000 children from age three throughout their school careers. EPPE explored a combination of structural and process quality variables in provision of ECE to determine "if quality matters, do different levels of quality have different impacts in the longer term?" (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2011, p. 111).

Using an ecological framework (Fenech, 2011) EPPE determined what constituted high quality by assessing variables within the structural and process features of the nursery environments, resources and interactions using the *Early Childhood Environment Rating Scales, ECERS-R* (Harms, Clifford & Cryer, 1998), and *ECERS-E* (Sylva, Siraj-Blatchford & Taggart, 2003) that provide standardised scores based on expert observation of practice. EPPE also collected evidence on variables within the child's background, the qualification levels of practitioners and assessed the balance of adult-led and child initiated learning (Sylva et al, 2004b, p. vi). Although the research focused on children aged three onwards, there are findings about the lasting impact of attending pre-school that have relevance to two-year-olds. For example, EPPE found that at age seven, social and cognitive gains were still evident for children who started attending a setting between the ages of two and three (p. iii). In terms of durability the study concluded that the impact of attending a high quality pre-school was still evident in children's cognitive and behavioural outcomes at age 11, whereas for children who attended a low quality pre-school there were no differences in outcomes compared with children who had not attended pre-school at all (Sylva et al., 2011, p. 109).

The EPPE study was extended to become the *Effective pre-school, primary and secondary education project* (EPPSE) in order to explore the "lasting effects" of pre-school education on students up to age sixteen plus (Sylva et al., 2014). It claims the following 'lasting effects' of pre-school:

> Attending any pre-school, or attending for a longer duration in months, and attending a higher quality pre-school, all predicted a greater likelihood of entering the most demanding academic route (studying 4 or more A/AS levels) and a reduced likelihood of taking a lower academic route.
> (p. 19)

This is significant as the findings at age sixteen could be interpreted as meaning that attending any pre-school (regardless of whether its quality is assessed as 'high' or 'low') as opposed to not attending pre-school, is a predictor of better GCSE results. With the current government focus on cutting costs, the finding that any 'quality' of pre-school makes a difference could have an impact on future ECE policy such that the minimal quality expectations could be reduced to increase the affordability and sufficiency of places. It could be argued that this is already happening in the home-based childcare sector where childminders without a recognised childcare qualification are already able to claim FEL funding for two-year-olds (DfE, 2017b).

With specific reference to 'disadvantaged' pupils, EPPE found that in terms of social outcomes the benefits of attending pre-school were greatest for boys, SEND pupils and disadvantaged pupils. But, in terms of outcomes for English and Maths at the end of Key Stage 2, "only pre-schools of medium or high quality had lasting effects" (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2008, p. 104) which is another expression of what might be described as durability. An issue here is that the means of assessing quality in the EPPE research and the means of assessing quality in Ofsted inspection are different and particularly for under-three provision the outcomes of assessment have also been found to be very different. In Mathers et al.'s research (2012) they found that where Ofsted had graded settings as high quality there was a higher correlation with ECERS (Harms et al., 1998) scores than with the scores for ITERS (Harms et al., 2006) audits

aimed at younger children. One interpretation of this finding is that the Ofsted inspection process places more value on the educational aspects of provision that the ECERS audit focuses on than the care aspects of provision that have a higher profile in the ITERS audits. I further discuss the divide between education and care in the next chapter (see section 5.2).

Going back to my earlier question at the start of this chapter regarding how decisions are made about what constitutes quality, I would argue that the EPPE research findings are an example of how headlines taken from research can influence policy makers. It is highly likely that the EPPE research referenced above is the source of the statement "We know that the quality of provision is particularly important for disadvantaged children" (HMG, 2013, p. 30). Further, although government documents citing the importance of high quality for disadvantaged children tend not to go into detail of what that quality means, the influence of what EPPE considered as high quality can be seen in government policy. For example, the EPPE team correlated children's outcomes with structural aspects of provision and found that children had better outcomes where there were graduates teaching in settings. A policy of increasing the number of graduate leaders in ECE was subsequently introduced.

Whilst the EPPE research uses the longevity of outcomes for children a marker of what differentiates high from low quality settings, the focus of EPPE is still on identifying and comparing the structural and process aspects of provision and practice that produce said quality. This is very different to the understandings of quality I will be discussing in the next section, where the outcomes themselves are the most important focus to be specified and compared as a measure of quality and where I argue that the influence of business management practices have become more overtly enacted.

4.3 How to achieve quality - lessons from the business sector

This section focuses on what I perceive to be a step change in the discourse of quality in education. Whereas the research mentioned in previous sections explored the different views of those taking a philosophical or perspectival stance on quality and those who believe quality to be a

measurable phenomenon, this section is an exploration of the ways that ideas borrowed from other arenas, notably systems engineering, operations management and disruptive innovation, have been implemented in education. Again, there is evidence of sedimentation and layered understandings of quality influencing policy and practice.

4.3.1 Operations Management and Statistical Process Control

In a recent review commissioned by the National Union of Teachers, *Exam factories? The impact of accountability measures on children and young people* (Hutchings, 2015) teachers offer many examples likening their perception of the current education system to an industrial style production line. However, the adoption of business strategies for the management of schools is not a new development. Examples from the nineteenth century include the 'Monitorial system' whereby pupils were rewarded for learning and then passing on that learning to other groups of pupils, significantly increasing the possible staff-pupil ratio and making provision of elementary education cheaper (Nutbrown & Clough, 2014) and 'Payment by results' was introduced later in the nineteenth century to incentivise teachers (Copeland, 1996). Both of these strategies aligned with general business theories at the time (for example, see Morgan, 1997) and were seen as ways of improving outcomes and achieving value for money. I believe that what has changed since the nineteenth century is the contemporary understanding of how to most efficiently and effectively manage industrial production that has subsequently influenced service industries and includes the way policy makers have designed strategies to improve educational outcomes.

> Approaches using Statistical Process Control (SPC); using data analysis to inform the continuous quality improvement of large systems is one such strategy that is seen as relevant for adoption and adaption by service industries.
> (Snee & Hoerl, 2005)

> SPC starts with the analysis of processes and collection of data. Its objective is the *prevention* of non-conformities rather than the costly *inspection* of finished goods by observing upstream process variations.
> (Dal Pont & Azzaro-Pantel, 2014, p.145. Original emphasis)

Following operations management logic, a simple manufacturing process can be considered in three parts; input, process, output (Dal Pont & Azzaro-Pantel, 2014, p. 128). First, as materials are fed into a manufacturing process, anything substandard should be either removed or repaired before the process starts. Then, the manufacturing process itself should follow best practice methods (in order to reduce variations in output). Finally, at the end of the manufacturing process there is a further quality check that focuses on conformity to product standards. It is often measured via techniques such as 'Six Sigma' (Pyzdek, 2003) that concentrates on statistical analysis of deviation from expected quality standards.

Through such a production-based lens it is possible to view the two-year-old FEL initiative as an initial quality control system, positioned to identify children who are not 'ready' to enter the next part of the process. Thus, as I argue in more detail later in this thesis, the two-year-old classroom becomes the workshop to 'repair and prepare' children for the next stage of the education process. Continuing this analogy, the second stage of the process would include the influence of notions of sharing and scaling-up best practice in terms of 'what works'. The third part of the process would be the focus on outcomes via accountability measures and would include the focus by successive governments on the gap between pupils achieving expected norms at each stage of their education, and those who do not. Thus a tripartite educational 'process' emerges consisting broadly of school readiness, what works and accountability measures.

Arguably, the DfE now performs the role of a commissioner of services where required standards and outcomes are specified and it is then left to education providers to achieve the outcomes in the best way they see fit. This is a common approach used in manufacturing and retail (e.g. Hanna, 2008; Oakland, 2003) that allows, so it is claimed, for innovation and cost reduction within the system. Where businesses are not directly responsible for producing goods or components they specify the standards required of suppliers, but not the means of achieving them. This is thought to provide the supplier with the flexibility to innovate and make efficiencies within the manufacturing process whilst at the same time making the supplier

responsible for quality control. The benefit to the commissioning organisation is that the supplier is contractually bound to produce goods that meet particular quality standards at a pre-arranged cost, thereby producing value for money whilst reducing personal liability.

As a commissioner of services the DfE is using a similar approach, placing responsibility for the quality of process and outcomes on education 'suppliers'. It could be argued that this approach makes a lot of sense, and does so from a non-business perspective, since education providers are able to respond to local conditions and the individual needs of their pupils, families and communities, rather than having to follow a centrally prescribed agenda. However, in *More Great Childcare* it is made very clear that in return for greater freedoms in how providers arrange their services there is a trade-off to be made in terms of accountability to taxpayers who "rightly expect that public money spent on free early education, or on tax credits to support the costs of childcare, pays for high quality care and learning" (DfE, 2013b, p. 34).

A systemic view of continuous quality improvement recognises that in the most effective systems 'quality' is not a function of one department but responsibility for quality needs to be distributed throughout the entire organisation (Oakland, 2003). Following this logic it would seem important that everyone within the organisation has a shared understanding of what quality means. And here is the rub. If continuous quality improvement (as specified by the DfE) is to be achieved across the whole education sector, it would be important for everyone within the system to understand quality in the same way as the DfE. Therefore to become the "sole arbiter of quality" (DfE, 2013b, p. 11) other understandings would need to be marginalised. How this might be achieved is discussed in the next section.

4.3.2 Disruptive innovation: Getting more for less and encouraging innovation in the system

In the Canadian context Cleveland et al. (2007) recognised the complexity involved in comparing the quality of different types of nursery provision. They were comparing nonprofit and for-profit organisations, arguing that broadly speaking the nonprofit organisations produced better quality

services. A business logic is then applied to the motives of the for-profit organisations in not striving for higher quality when it is claimed that they could be purposefully "aiming to produce child care of moderate quality but at a cheaper price" (p. 11). This aligns with Garvin's "user-based" (1984, p. 29) definition of quality where the aim is to meet or exceed customer needs or expectations at an affordable cost. An intentional goal of moderate quality, that is good enough to meet statutory minimal requirements but does not exceed them, highlights the tensions identified in the quality debate (see section 4.1) between meeting the needs of those receiving services (children and parents) and the differing needs of those paying for the services (parents and Government).   This approach might be described as 'getting less for less'. The remainder of this section considers a different understanding of quality; how to 'get more for less'.

> Like every other western industrialised nation, we won't sustainably live within our means with unreformed public services and outdated welfare systems. We have to be completely focused on getting more for less in our public services. (Cameron, 2011, paras. 21-22)

This quote highlights the former Coalition Government's concern about the rising demands and costs of public services and welfare systems. Getting 'more for less' is a tagline for a quality improvement strategy called 'disruptive innovation' which is a term coined by Christensen (1997) and is based on a scientific understanding of complexity and systems theories. Several references have been made in ministers' speeches and by government 'insiders' (HM Treasury [HMT], 2015, Tickle & Ratcliffe, 2014; Gove, 2012a; Gove, 2012b) that suggest Cameron's government perceived this quality improvement strategy as a promising way of cutting costs and improving the outcomes they wanted to achieve within education.

Christensen (1997) argues that rather than quality being free it is actually expensive because managers who are striving for ever improved products are often busy producing goods that are not affordable and therefore irrelevant to the mass market, or are developing product features that are not valued or required by consumers thereby creating unnecessary costs in the manufacturing process. He further contends that managers who are

listening to their customers and doing things right the first time, as advocated by traditional quality improvement strategists such as Crosby, are actually doing the wrong thing. He draws on examples from the information technology sector to demonstrate how cheaper and initially inferior quality products have been able to compete successfully with market leaders and how, once established, the new market innovators have been able to steadily improve product quality and in many cases have destroyed their competition. This is how business consultants advising government departments argue that it is possible to get more for less (Eggers, Baker, Gonzales & Vaughn, 2012).

A complexity scientific understanding of systemic change can be detected in the strategies and terminology used by the former Minister for Education (2010-2014), Michael Gove. For example it is well documented that he referred to the education establishment comprised of LAs, university academics and teaching unions as 'The Blob' (Young, 2014; Gove, 2013). What Gove was referring to was the difficulty experienced by past government administrations to effect any significant change in the education system and can be explained by what Morin (2006, p. 9) termed "self-eco organization"- a property of systems to respond to change in such a way that they maintain a certain degree of stability. Whilst there has been huge change in the education system as a result of government policy, Gove may be correct in suggesting that these changes are not exact extensions of what policy intended.

Advocates of disruptive innovation claim that in order to create the conditions in which disruptive innovations might survive, it is important to provide the organisations that have newly introduced innovations with protection from the established system until these organisations are strong enough to compete in the market on their own terms (Eggers et al., 2012). An example of a disruptive innovation in education would be the introduction of free schools that when they were first introduced existed beyond the reach of Ofsted inspection. Now new free schools and academies have three years to establish themselves before being subject to Ofsted scrutiny. Another example of disruptive innovation is the fact that free schools and academies

have the discretion to employ unqualified teaching staff should they wish to do so and to operate outside of the national agreements for teachers pay and conditions, thus providing these schools with the opportunity to reduce costs.

It could be argued that the introduction of two-year-olds into schools is an example of disruptive innovation, though the policy was never explicitly framed in these terms. First of all, current teaching qualifications do not prepare teachers to work with under-threes which means that it is less likely that teachers will be constrained by preconceived ideas about what two-year-olds 'need' (the philosophical argument I introduced in section 4.1.1). Also, teachers are much more likely to be driven by data and outcomes than their counterparts in the PV sector because of the differences in the way data is used in the two sectors through the Ofsted inspection process (I discuss this further in section 5.2.1). In combination these two factors could result in a more outcome driven approach to provision for two-year-olds.

Taking a complexivist look at disruptive strategies it is possible to view them as a means of protecting a newly developing concept of an education system from the interference of the existing system; as a means of avoiding the undue influence of the status quo within the ECE system. I argue that a particular understanding of complexity and systems theory was employed by government to manipulate the system and to predict uncertainty – ensuring that change happened. Arguably what these strategies did was to attempt the removal of the philosophical paradigm from any discussion of quality, leaving the scientific, measurable understanding intact and unchallenged.

4.4 Chapter conclusion

There have been many attempts to qualify and categorise the concept of quality in education and it is generally understood that there are multiple understandings that exist in multi-layered and complex ways. Values held about the purpose of education underpin beliefs about what constitutes quality in education and the term is frequently used as a kind of 'shorthand' without the perceived need for explanation. The possibility for misinterpretation is increased when communication occurs between those

working in different parts of the same organisation or in other systems to which the organisation is connected because what is valued and the subsequent interpretations of quality may be different and may not be made explicit. A view from complexity highlights that the feedback loops occurring within systems allow for the way we think to inform the way we act and the way we act to inform the way we think. Therefore there is also a danger that as the term quality has become commonplace and the sense that no explanation is required has developed, it could result in the technologies used to achieve or measure quality also going without scrutiny or challenge.

The influences of interpretations of quality that have developed over time in business management are evident in the way that quality has been interpreted in the education sector. Although there is still evidence of multi-layered understandings of quality in the education sector, the most recent quality improvement strategies introduced by DfE have taken a whole system approach from 'input to output' rather than a piecemeal approach to improving specific aspects of structural or process quality. I argue that the two-year-old FEL provision is positioned as the first stage in a process informed by technologies of SPC where children are made ready for the next stage of the education process.

Successful implementation of a new whole-system approach required that competing interpretations of quality were marginalised, hence the Coalition Government strategy of positioning Ofsted as the "sole arbiter of quality" (DfE, 2013b, p. 11). A complexity view of this situation highlights the possibility that, as measurable aspects of quality become the norm, other philosophical/cultural understandings of the 'quality debate' may become diminished. In the next chapter I focus-in on the messages about quality that are being promoted as part of the two-year-old FEL initiative.

Chapter Five – Recent History

In the last chapter I referenced the work of Dahlberg et al. (1999) who claimed that to understand what is meant by quality in a society you must first understand how childhood is being understood as well as the purpose of education. Through the vehicle of the two-year-old FEL initiative, this chapter begins to answer those questions and exemplifies how ideas about quality can be influenced and changed even over a relatively short period of time. When changes in a system are small, incremental and constant it is sometimes necessary to step back to gain an overview and recognise the scale of change, or indeed, that change has occurred. To support this process, significant changes referred to throughout this chapter are documented in Figure 5 which is my interpretation of the trajectory of the two-year-old FEL initiative between 2004 and 2015.

In Chapter Four I developed a dialogic understanding of quality from both ECE and business management perspectives, noting links between the two systems. In this chapter I narrow the focus from ECE to my interpretation of the history of the two-year-old FEL initiative and how schools, not previously associated with the care and education of under-threes, became involved. In the following analysis I am guided by this remark of Cilliers:

> The 'effects' of the history of the system are important, but the history itself is continuously transformed through self-organising processes in the system – only the traces of history remain, distributed through the system (Cilliers, 1998, p. 108).

As Cilliers suggests, the effects of the history of the system are important because it is the history of a system that contributes to its current form. Systems constantly react with their environments. Indeed, each school system within the wider education system has its own unique history and therefore each school will react differently to its specific environment. For this reason any interpretation I attempt to make can only ever be considered as an example of what Cilliers (1998, p. 80) termed a "snapshot"; seen from a particular space and time. I include in my interpretation what I currently

believe to be important historical factors within this specific aspect of the English education system.

Most two-year-old FEL places are provided in the private and voluntary (PV) sector (DfE, 2017a) whereas large scale provision for two-year-olds in schools is quite a recent phenomenon. This chapter starts by providing an overview of the ECE system in England. I introduce the eligibility criteria for two-year-old FEL places because this cohort of two-year-olds is considered to be statistically less likely to be 'ready' for school and therefore more likely to benefit from early interventions in order to improve academic outcomes. I then go on to explore the development of the two-year-old FEL initiative from small beginnings to a position where 40% of all two-year-olds in the country are now eligible for a place. Crucially, I ponder some of the reasons for the expansion and why schools are now part of the delivery model. I explore the dual rationale that frames the two-year-old FEL initiative – namely to improve children's academic outcomes and encourage more mothers back into work, before discussing how I believe definitions of 'disadvantage' are being conflated in the public consciousness with poverty, poor parenting and under achievement.

5.1 The background of the two-year-old FEL initiative

The English ECE sector is a mixture of different types of provision offering places for children under five years, the statutory school starting age. Whilst remaining aware that marketisation of the sector has blurred the boundaries between the different types of provision, in order to be able to make useful comparisons I separate this provision into two categories:

- A school sector made up of LA maintained schools and nursery schools where classes are directly taught by qualified teachers, and free-schools and academy schools where classes are typically taught by qualified teachers.
- A PV sector where children do not have to be taught by graduate level practitioners. It includes home-based child-carers, day nurseries, pre-schools and playgroups.

Figure 5: Timeline showing the development of the two-year-old FEL initiative 2004-2015

Key to colour coding
Labour Government
Coalition Government
Conservative Government

2004

'Choice for parents, the best start for children: a ten year strategy for childcare'. The concept of a pilot of free places for disadvantaged two-year-olds is introduced (HMT, DfES, DWP & DTI, 2004).

2005

2006

Childcare Act 2006 included duties on Local Authorities (LAs) to secure prescribed early years provision free of charge and the intention to introduce an 'Early Years Foundation Stage' for children aged from birth to 5.

Phase one of pilot. 15 LAs. 7.5 hours x 38 weeks.

Phase two of the two-year-old pilot. 17 more LAs. 7.5 hours x 38 weeks in 29 LAs and 12.5 hours in 3 LAs. By 2008, a total of 13,500 children had accessed two-year-old- FEL places.

2007

2008

September 2008, the Early Years Foundation Stage (EYFS) becomes statutory (DCSF, 2008).

Phase three of the two-year-old pilot. 31 more LAs join the pilot - are offered 15 hours x 38 weeks to include outreach work.

January 2009 *'Ending Child Poverty: Making it Happen'* is published (CPU, 2009). It highlighted the links between poverty and the risk of poor outcomes for children.

2009

The pilot is extended to all 152 LAs in

October 2010, the Deputy Prime Minister announces a 'Fairness Premium' to include educational support for disadvantaged children between ages 2 to 19, as part of the Coalition Government's 'Social Mobility' policy (Clegg, 2010).

April 2011, HMG (2011b) publishes 'Opening Doors, Breaking Barriers: A Strategy for Social Mobility'. It includes free education and care for disadvantaged two-year-olds as part of its 'life-cycle' approach to addressing social mobility.

November 2011, the Education Act 2011 receives Royal Assent. It enables Government to extend early years provision to disadvantaged two-year-olds.

October 2012, the Local Authority (Duty to Secure Early Years Provision Free of Charge) Regulations 2012 is laid before Parliament.

December 2013, The School Organisation (Prescribed Alterations to Maintained Schools) (England) Regulations 2013 is laid before Parliament. It lays out the procedures for schools wishing to change the age range of pupils attending a school.

Small Business, Enterprise and Employment Act 2015.

2010

England. Approximately 15% of the most disadvantaged two-year-olds are eligible for places, 23,000 children per year. 10 hours x 38 weeks.

2011

2012

2013

Early Learning for 2 year olds trials. DfE funded 10 Local Authorities

20% of all two-year olds in England eligible for 15 hours of free early learning.

2014

40% of all two-year olds in England eligible for 15 hours of free early learning.

2015

October 2010, HMT (2010) announces a funding increase within its Spending Review to provide additional places for all disadvantaged two-year-olds from 2012-2013 (approximately 20% of two-year-olds; 130,000 places).

November, HMT (2011) announces within its Autumn Statement, an increase to 40% of all two-year-olds in England eligible for 15 hours free education and care per week (260,000 places) by September 2014.

March, DfE (2012) publishes a revised EYFS which includes a statutory duty to carry out two-year-old progress checks and share with parents. Informing parents when children are not meeting age-related expectations becomes a statutory duty.

January, DfE (2013b) publishes 'More Great Childcare' proposing relaxed ratios for children under three and changes to the way schools register to take two-year-olds.

June 2013, proposals to relax ratios for children under three are scrapped after opposition from the early childhood education sector (Harrison, 2013).

April 2014, Ofsted Early Years Report published which encourages provision for 2 year-olds in schools and comparable inspection arrangements between maintained schools and PV providers (Ofsted, 2014).

ECE providers from both school and PV sectors can offer Government funded FEL places if they are registered with Ofsted, the body responsible for regulating and inspecting both sectors and whose representatives are designated by the DfE as the "sole arbiter of quality" (DfE, 2013b, p. 11). Since September 2014, two-year-olds who are categorised as "disadvantaged" (HMG, 2012, p. 5) and all three and four-year-old children are eligible for fifteen hours of free early education and childcare per week for thirty-eight weeks per year. This equates to the length of the academic year.

Eligibility for two-year-old FEL places is currently based on meeting one of the following criteria:

> The parent(s)
> - meet a 'poverty' criteria - a joint annual income of under £16,190 before tax and in receipt of certain means tested benefits. This is the same eligibility criteria as Free School Meals (FSM). Or,
> The child
> - is looked after by a local council
> - has left care under a special guardianship order, child arrangements order or adoption order
> - has a current statement of special educational needs or an education, health and care (EHC) plan
> (GOV.UK, n.d.).

Two-year-old FEL places were first offered as part of a pilot that ran between 2006 and 2008. The initiative was developed as part of the last Labour Government *10 Year Childcare Strategy* (HM Treasury, Department for Education and Skills, Department for Work and Pensions, Department for Trade and Industry. [HMT, DfES, DWP, DTI], 2004). In the first two phases of the pilot there were thirty-two English local authorities that coordinated the initiative and allocated places according to their own local criteria (Kazimirski, Dickens & White, 2008). This resulted in a range of approaches. Some authorities provided a universal offer to all two-year-olds living in areas of disadvantage, for example according to the Income Deprivation Affecting Children Index (IDACI). Others targeted their offer at families or children and

families presenting with very specific vulnerabilities such as speech and language difficulties, disability, single parent families and low income (Smith et al., 2009).

In September 2008, following the global financial crisis, the third phase of the pilot was introduced to a further thirty-two local authorities. At this point the criteria had started to narrow down. There was a focus on identifying families in terms of 'economic deprivation' and the Department for Children, Schools and Families [DCSF] imposed financial eligibility criteria that were based on parents receiving specific benefits (Gibb et al., 2011). However, at that stage, local authorities were still able to add their own additional criteria to the financial ones and so the eligibility criteria remained fairly open. After the General Election in 2010, the new Coalition Government continued with plans to phase in two-year-old FEL as a universal offer to all 'disadvantaged' two-year-olds throughout England and the eligibility criteria were now set centrally. The plans were part of a new £7.2 billion "Fairness Premium"; a fund to "increase support for the poorest in the early years and at every stage of their education" (HMT, 2010, p. 7).

When the first phase of the universal offer began in September 2013, 20% of all two-year-olds in England became eligible for a place (130,000 places). In September 2014 the criteria for accessing two-year-old FEL places was broadened by the DfE to include more low income families, addressing the identified need of children living in families experiencing in-work poverty. This meant that the number of eligible children rose to approximately 40% of two-year-olds (260,000 places). The funded places were now allocated to two-year-olds living in households that met the eligibility criteria for Free School Meals (FSM) which became a proximal indicator for poverty (Ofsted, 2016b).

5.1.1 Background to the involvement of schools

Between April 2011 and March 2012 eighteen LAs took part in fifteen trials exploring ways of increasing the places available for two-year-olds in preparation for the first phase of a planned expansion of places that would start in September 2013. The three aims of the trials were to look at: i) ways

of building capacity in the system, ii) improving the quality of provision and practitioners, and iii) considering flexibility in the offer to meet the needs of parents. Four out of the eighteen LAs included primary schools in their trials either as a direct provider or as a partner with others, for example, a playgroup based on a school site (Goody, 2012, p. 8).

As part of the strategy to meet the increased demand for places, the Minister for Education and Childcare, Elizabeth Truss, encouraged schools to consider offering places for these two-year-olds with a promise that legislation would be made to ease the process of doing so (DfE, 2013b). At that time, if a school wanted to offer two-year-old places it would have involved a separate Ofsted registration process that could take a minimum of six months to complete, even though most of the obligatory checks were a repetition of those already carried out as part of the school organisation. It would also involve a potentially difficult statutory process to officially change the age range of the school, including a local consultation process with the possibility of controversy, for example, with other ECE providers in the area. These two processes were perceived by the DfE as barriers to the participation of schools in providing places for two-year-olds. The removal of these barriers could be perceived as an example of a disruptive innovation (see section 4.3.2) because schools were protected from some of the usual statutory expectations for registration that would still apply to the PV sector. Given the lengths that the Government went to in order to make the participation of schools not just possible, but easily achievable, one might suggest that they saw great benefit in doing so. It begs the question, was the benefit simply in terms of increasing the supply of places required to meet the planned expansion, or was it to do with the type of provision they perceived schools could offer?

On 14th January 2014 *The School Organisation (Prescribed Alterations to Maintained Schools) (England) Regulations 2013* came into effect. Following the changes, it was no longer necessary for governors of Voluntary, Foundation or Community schools to follow a statutory process in order to lower the age range of a school by up to two years. This meant that any school with a reception class would be able to take two-year-olds, even

schools without existing nursery provision. On 26th March 2015 the *Small Business, Enterprise and Employment Act 2015* received Royal Assent. This act (p. 56) amended the requirement in the *Education Act 2006* for schools to separately register any childcare and education provided for children under three years and changed the lower age limit to two years-of-age. Truss' promise to remove the "cumbersome statutory processes" (DfE, 2013b, p. 40) facing schools who wanted to make provision for two-year-olds had been fulfilled and the stage was set for a huge expansion of places for two-year-olds in schools.

5.1.2 The distribution of two-year-old places across the school and PV sectors

DfE figures for 2017 state that 71% of all eligible two-year-olds took up at least some of their FEL entitlement which was an increase of 3 percentage points on the previous year and 13 percentage points since 2015. Children who take up only part of their entitlement include those who start attending school nurseries in the term that they turn three - one term before children become eligible for the universal three and four-year-old FEL places. Figures showing how take-up of places is distributed across the two sectors do not distinguish between FEL places and places paid for by parents. In 2016 group care settings in the PV sector provided places for 88% of two-year-olds attending out of home care, 62% of three-year-olds accessing places and only 19% of four-year-olds. In contrast schools and nursery schools provided places for 11% of two-year-olds, 31% of three-year-olds and 76% of four-year-olds (DfE, 2017a).

Reasons for this particular distribution of places include the fact that the majority of four year olds access a full-time place in Reception class at the start of the academic year that they turn five years old. It is likely that the majority of places required for children under three are to meet the childcare needs of working parents. This is because traditionally the PV sector has offered longer opening hours that meet the demands of working parents (Ofsted, 2015a, p. 15), hence the higher percentages of places for younger children in that sector. Most school nursery places are sessional and fit within the shorter school day. Typically, as a result most two-year-old places

in school will be sessional and, as stated earlier, some of those places will actually be for children who have just turned three-years-old but who are not yet eligible for the three and four-year-old FEL places. This could potentially result in a segmentation of the sector, with two-year-old children of working parents in full day care or with home-based childcarers, and two-year-old children of families experiencing the greatest levels of poverty attending the school nurseries.

Given that the DfE had already decided that what children accessing two-year-old FEL places need is provision in settings (of whatever type) judged by Ofsted as being 'good' or 'outstanding' (HMG, 2013, p. 30), I find it puzzling that in 2014 Wilshaw altered that position and claimed that what they in fact needed was a school place (see quote in section 4.2.2). Why Wilshaw (2014, p. 7) singled out schools, a sector with such a short history of providing places for two-year-olds, as *the* most appropriate place for children that he describes as "facing serious disadvantage" was unclear at the time. However, an insight into his rationale was later provided when he argued the case for schools being best placed to offer FEL places because of their track record of narrowing the outcomes gap at the end of the EYFS, their access to specialist support and the smooth transitions they could provide into school nursery provision (Wilshaw, 2016). This argument is heavily entrenched within the school readiness agenda.

Building on arguments concerning Wilshaw's interpretation of the term 'early years teacher' made in the previous chapter, I will be investigating some of the factors potentially influencing his statements. To start this process, next in this chapter I briefly explore some interrelated themes that are woven through the history of the two-year-old FEL initiative. To provide a richer context for my description of the system's 'trajectory' (Byrne, 2005) and tracing the history of how quality has come to be understood in the way that it is, in this section I introduce the ideas of i) education and/or care, and ii) what I argue has become a correlation between poverty, school readiness, the role of parents and social mobility.

In section 3.3.3 I referenced the work of Thomas, G. (2011, p. 514) who advised that "the analytical focus [of the research] crystallizes, thickens, or develops as the study proceeds". This was my experience and the ideas I explore in the following sections of this chapter emerged in a recursive way. I cannot say exactly when or where the ideas first emerged as some of the analysis may have occurred on a subconscious level. However I found that things that emerged in the literature and struck me as significant I spotted in the interview data and things that struck me as significant in the interview data I also sought out in the literature. Over the extended periods of data analysis and writing the thesis some ideas crystallised and were included in the final account whereas others appeared less significant and therefore were not pursued to the point of inclusion in the final written version. This is an aspect of 'managing the mess' I referred to in section 3.3.1 in order to produce a coherent account of my research.

5.2 The concepts of 'education' and 'care'

It is widely argued that an ethic of care is a necessary and inseparable part of education and vice versa (Lancaster & Kirby, 2014; Noddings, 2012; Kaga, Bennett & Moss, 2010). However, the notion of 'care' is part of two divergent rationales for EYFS provision both in terms of meeting children's educational needs and also in meeting parental childcare needs linked to employment. ECE provision is frequently positioned as meeting both functions at the same time. For example, in a speech promoting the increase of pre-school provision in schools, the Minister for Childcare, Gyimah (2014) stressed the importance of schools emulating PV sector provision in terms of flexibility of hours (a childcare argument) whilst claiming that schools have "expertise" which is presumably a reference to greater expertise in terms of education. Below I argue that the way that 'care' is conceptualised in relation to education impacts on the way that ECE provision is organised and the way that ECE provision is organised can also impact on how 'care' is conceptualised.

Van Laere, Peeters and Vandenbroeck (2012) claim that in countries where the functions of care and education are viewed as separate concerns the

'care' aspects tend to focus on children's physical and emotional needs and the 'education' aspects are more narrowly conceptualised as meeting children's cognitive and language needs in the form of 'learning'. They argue further that even in integrated education and care systems the divide between education and care can be seen to be perpetuated as a result of the division of roles and responsibilities between teachers and their assistants and that there is a danger of a hierarchy being formed, particularly in systems where education is embroiled in a discourse of school readiness. A divide between 'care' for younger children and 'education' for older children can also position 'care' as something that is age specific and something that children will grow out of (Moss, 2017).

In the English context, the *Childcare Act 2006* announced a single Early Years Foundation Stage for all children from birth to five years and became statutory in 2008. It marked a significant policy shift from a split education and childcare system to one that was intended to be integrated. It also signalled a departure from some previous thinking that 'care' was the domain of those working with under-threes and 'education' for those working with children three and above that had been perpetuated by the existence of different policy documents for children aged birth to three (Sure Start, 2002) and those over three years-of-age (Department for Education and Employment, 2000).

With the introduction of the single EYFS came the expectation that all types of ECE provision would have to meet the same education and care requirements under Ofsted's regulation and inspection regimes. The policy links between the PV and school sectors have been further strengthened as since 2015 there has been a single inspection regime for both sectors and since 2018 responsibility for both sectors has rested within a single ministerial department. However, even though there is currently a single Ofsted inspection framework that is relevant to schools and the PV sector, I believe that because the current focus of the inspections in each sector appears to have different weightings on children's 'academic' outcomes, there is the potential for very different working practices to be produced and different interpretations of care and education.

I argued in section 5.1 that the boundaries between the school and PV sectors are blurred. There is also complexity present within each sector such as the impact of business strategies that I highlighted in section 4.3.2. Contextual differences produce different possibilities or choices in each organisation and there is the potential for very different outcomes to occur. In the next section I discuss the impact of measurement which can be seen as a means of reducing complexity in the system and producing more predictable outcomes.

5.2.1 The impact of measurement

In Chapter Four I highlighted that understandings of quality are dependent on how childhood and the purpose of education are perceived. Where quality is understood in measurable terms the purpose of education impacts on the purpose of measurement which then impacts on both the choice of what is measured and how the measures are carried out. In turn those choices impact on the outcomes that are produced.

From the beginning of the two-year-old FEL initiative, a condition for providing places is that the provider has a 'good' or 'outstanding' Ofsted inspection outcome signifying that the provision is deemed to be high quality according to what is being valued (or measured) by those developing the inspection process. However, Mathers et al. (2012) question whether the Ofsted inspection framework on its own can produce reliable assessments of the quality of two-year-old provision, particularly with regard to process quality and aspects of quality that "are predictive of positive outcomes for children" (2012, p. 95). Whilst they found a strong correlation between outstanding Ofsted judgements and high ECERS (Harms et al, 1998) scores in provision for children from 30 months to five years, they found "little obvious association" (p. 73) between Ofsted judgements and ITERS (Harms et al., 2006) audit scores (aimed at provision for children under 30 months). In their findings they reported that in most cases where settings had been given outstanding Ofsted judgements they had scored badly in the ITERS. As the "sole arbiter of quality" (DfE, 2013b, p. 11), it is questionable whether the DfE and Ofsted would consider the discrepancies reported by Mathers et al. to be an issue. Indeed, taking into account the arguments made by

Wilshaw about the advantages of two-year-old provision in schools, they might perhaps consider settings judged to be high quality for older children to be more desirable for children accessing two-year-old FEL places. The following argument supports this idea.

The requirements for achieving 'good' and 'outstanding' early years inspection outcomes appear to be similar on paper in both school and PV sectors. However, I argue that in practice the emphasis on data is far greater in school contexts as if the DfE is operating two nominally identical but operationally different inspection regimes. Within the EYFS there are two statutory assessments that have to be carried out on children:

- The Two-Year Progress Check to be carried out when the child is between twenty-four and thirty-six months old (only completed if children access early years provision). This data is not centrally collected by government.
- EYFS Profile (EYFSP) measures collected nationally for all children at the end of the academic year in which they have their fifth birthday. This data is used as part of the school accountability process.

The purpose of the two-year progress check is to assess children against typical developmental expectations in the three Prime Areas of Learning: Communication and language, Physical development, and Personal, social and emotional development (PSED) (DfE, 2017b). This age is when it is claimed that differences between 'disadvantaged' children and their more affluent peers begin to show after which the gap between the two groups develops and grows year on year (Feinstein, 2003; Hart & Risley, 2003) and has become part of the argument for early intervention (see section 4.1.2).

Not all children access places before taking up their FEL entitlement at age three and therefore they will not have a two-year progress check. Of those who do, the children from more affluent families are reported to be statistically less at risk of poor outcomes than the 'disadvantaged' children who are eligible for the two-year-old FEL places (Ofsted, 2016b, p. 8). Those 'disadvantaged' children who take-up their two-year-old FEL entitlement are made visible in the system for the first time via the

mechanism of the statutory assessment. If two-year-olds are judged to be behind in any aspect of development there is a statutory expectation that parents will be informed and early interventions introduced to fix or remediate the identified problem (DfE, 2017b). This is part of the school readiness agenda that I introduced as part of a production-based understanding of quality in the last chapter and that I will discuss later in this chapter as one of the interrelated elements of my second theme of 'poverty and school readiness, the role of parents and social mobility'.

Some frequently repeated (but not attributable) adages in business management are 'what matters gets measured' and 'what gets measured gets done'. One way of reading this business management common sense, is that it signifies the means by which those making decisions about what matters hold power over those producing the measurable outcomes. It also suggests consequences, both positive and negative in relation to what is measured (meted out by those in power). I argue that the difference in emphasis of the inspections in each sector could result in practices for two-year-olds in schools having a stronger emphasis on the academic outcomes that are measured at the end of the EYFS.

The two-year progress check would not be classed as 'high stakes' as, although it is an expectation to carry out the assessment, it is essentially a baseline assessment for the education process that is to follow and there is no requirement to report outcomes further than to parents. In the PV sector there are no obvious repercussions to be visited on providers should the results of these assessments be poor as there is no comparative local or national data against which settings can be measured and potentially found lacking. Therefore it is unlikely that the two-year progress check would be seen as a direct accountability measure within the PV sector.

In stark contrast to this, the Early Years Foundation Stage Profile (EYFSP), an assessment that takes places at the end of the academic year that a child turns five-years-old, is viewed by schools as 'high stakes' (National Association of Headteachers, 2017; Bradbury & Robert-Holmes, 2016; National Association of Schoolmasters Union of Women Teachers, 2013).

Poor outcomes can trigger unscheduled Ofsted inspections that can subsequently impact on colleagues in other key stages and therefore have an impact on the whole school's Ofsted outcome (Ofsted, 2016a). For schools, the assessments made as children start their school journey, which may indeed be the two-year progress check, are the start of an accountability process that culminates in the EYFSP assessments and then continues as cohorts of children progress through school. Given the potential consequences, there can be little wonder that schools pour so much effort into developing elaborate systems to measure and track children.

Biesta (2015) argues that the technologies of measurement and comparison can change perceptions of what constitutes quality and do not give value to things that are not easily measured. He argues further that engagement with comparison technologies such as national or global league tables, and what might be described as a blind desire to reach the top, could result in 'improvement' strategies being employed without considering the possible human impact and whether such strategies are actually worth implementing. The idea that school leaders could be motivated by fear of the consequences of failure to comply with expected measures, or alternatively, a desire to outperform is also taken up by Ball (2003, p. 220) who argues it could encourage inappropriate methods of achieving the things being measured as schools "do whatever is necessary to excel or survive" . Ball (2003, p. 215) talks about the impact of accountability processes causing "opacity" rather than "transparency" as teachers change the way they present themselves and the way they teach to meet the expectations of those to whom they are accountable.

Therefore, although the DfE (2013b) positively promotes the idea that schools have the freedom to innovate and to do what is best for their pupils (which might include offering places for two-year-olds or employing different teaching methods), it is important to remember that this freedom is situated within a context of accountability. The introduction of accountability measures into the school system is another example of what might be described from a complexity viewpoint, as the process of the ecology of action where once ideas escape the person/organisation originating them,

they could interact in unexpected or unintended ways within the system and produce unexpected or unintended results (see section 2.1). However, whether the particular outcomes witnessed in the current education system were unintended, particularly those related to the impact of outcome measures, is a matter of debate. In this case, the concept of complexity reduction could equally be applied to understanding the impact of measurement insofar as the focus on measures could be seen to be reducing choices within the system, resulting in more predictable outcomes (see secton 2.4.2).

To conclude this section, I understand the impact of the different emphasis on 'academic' outcomes in each sector, particularly the way that children's progress and attainment is measured, tracked and analysed, as potentially producing different ways of working in the two sectors. Therefore, I question whether the strategy of advocating school provision for 'disadvantaged' children is producing (intentionally or not) a divide in the emphasis of each sector both between childcare and education and between care and education. What Morin (2008) described as feedback loops that react and retroact (see section 4.1.2) explains from a complexity viewpoint how accountability measures not only alter the way teachers perceive themselves and understand quality, but also change the way adults perceive children and their parents. The next section explores the impact of accountability measures in more detail and considers the multiple ways that children's "school unreadiness" (Tickell, 2011, p. 19) has been presented over time.

5.3 Poverty and school readiness, the role of parents and social mobility

The two-year-old FEL initiative has been entangled within a growing and data driven discourse on poverty and school readiness, the role of parents and social mobility. The four areas are so intertwined that it is difficult to decide where to start a discussion about them despite the way that these ideas are presented in some government documents and speeches that give the impression they are separable and that there are direct causal links between them. Over the period shown in my time-line (Figure 5) I contend

that messages presented about different vulnerabilities associated with poor educational outcomes have developed from a multi-causal explanation to a more linear, causal explanation and that the difference stems from the way poverty is perceived.

The focus on poverty has changed and intensified since the introduction of the two-year-old FEL pilot in 2006 to the present day. As I argue below, throughout all three government administrations during this period, increasing poverty has been positioned as a threat to national economic security, partly because of the additional welfare costs that would be incurred and partly because it is positioned as one of the causes of poor educational attainment (this links to the concept of efficiency as an expression of quality that I introduced in in section 4.2.4). In the area of ECE the key aspects of the original New Labour policies have been taken forward and adapted by the Coalition, then Conservative governments and developed with changes in emphasis and overall a growing sense of urgency. For example, in line with many other nations worldwide, good educational outcomes continue to be highlighted as the means to ensuring the future economic security of the nation in a globalised world (e.g. HMT, 2015; HMG, 2014; DfE, 2013b; DfE, 2010a; Child Poverty Unit [CPU], 2009). Also, some of the same neuroscientific arguments highlighting the importance of attachment relationships (notably with primary caregivers) and brain development have continued to be drawn upon in relation to children's readiness for school (e.g. Politowski, 2015; DfE & DoH, 2011; Allen, 2011a; Field, 2010; HMG, 2009). Further examples of continuity are the combined approaches by multiple government offices in terms of tackling poverty and getting more people (mainly targeting mothers) back into work (e.g. HMG, 2011a; HMT et al., 2004). However, despite the similarities in some of the policies and the arguments used to promote them, I believe that there are subtle differences in the way the issue of reducing poverty has been perceived between the different administrations.

In the document *Ending child poverty: making it happen* (CPU, 2009, p. 11) produced under the last Labour Government, the causes and the consequences of poverty were seen as "multiple and complex" and therefore

it was argued that multiple approaches were required to deal with them. The proposed strategy involved "Building Blocks" that consisted of simultaneous foci on i) employment and adult skills, ii) financial support, iii) children's services – education, health and family support, and iv) housing and neighbourhoods. Following this logic, the way to understand if the combination of strategies was having impact would be to keep measuring the levels of poverty as an indicator of improvement. So the focus was on reducing poverty with the arguably vague expectation that this would also have an impact on the multiple causes and consequences of poverty.

Under the Coalition and then Conservative administrations poverty was and still is understood as a cause of poor educational outcomes, albeit indirectly, and that it is mediated by the impact of poor parenting practices. At times poverty is presented as if it were part of a cycle (HMG, 2011b) with a linear relationship between each aspect of the cycle. In this understanding of poverty and its consequences, poverty becomes the cause of poor parenting practices, or a particular style of parenting, which subsequently means that children are not prepared for the expectations of the school system. This then means that children fall behind their peers and do not achieve the outcomes expected of them, which results in them being less 'ready' for the employment market and therefore more likely to live in poverty.

Causes and consequences of poverty are understood as one and the same and therefore poverty is used as an indicator of risk to poor outcomes. Thus, within this "life-cycle approach" (HMG 2011b, p. 6) to tackling poverty and to "preventing poor children becoming poor adults" (Field, 2010), the government's commitment becomes one of introducing strategies, such as the two-year-old FEL programme, in order to interrupt the cycle. The outcome that is subsequently measured is not poverty, but educational attainment. It is then the responsibility of parents, and eventually the two-year-olds themselves, to "work themselves out of poverty" (HMG, 2011a, p. 3).

5.3.1 The role of parents

It is widely argued that 'parenting' is part of a longstanding neoliberal discourse on the causes of poverty which is itself positioned as a lifestyle choice and the result of 'bad parenting' (Simpson, Lumsden & McDowell Clark, 2015; Ball, 2013; Gillies, 2008), laying much of the responsibility for parenting on mothers (Vincent, 2017). Within this discourse 'good parenting' styles that priviledge middle-class parenting and dispositions such as "aspiration" (Siraj-Blatchford, 2010) are promoted as a solution to the problem of poverty and poor outcomes (Allen, 2011a; HMG, 2011b; Field, 2010).

When investigating features of the home learning environment (HLE) the EPPE team identified the following parenting behaviours that would support children to have a successful start in school:

> reading with the child, teaching songs and nursery rhymes, painting and drawing, playing with letters and numbers, visiting the library, teaching the alphabet and numbers, taking children on visits and creating regular opportunities for them to play with their friends at home (Sylva et al., 2004a, p. v).

Brooker (2015) uses Bordieu's concept of cultural capital to argue that this particular definition of good parenting practice does not recognise the values of other cultural or class groups and that aspects such as holding a library ticket coud be considered tokenistic. Children with the kind of HLE described in the above quote have acquired "cultural capital that can be transposed from home into the field of schooling" (p. 44). Brooker acknowledges that offerng all children access to these experiences, as a way of compensating for their lack of the right sort of cultural capital, could be seen as a way of reducing social inequality. However, she also argues that the existence of such normative descriptions of good parenting can create a potentially inerasable deficit view of these children and families as they start school. This is another example of the ecology of action where unintended consequences are produced.

From the introduction of the two-year-old FEL initiative in 2006 to the present day, the stated or implied role of parents within the strategy appears to have

changed considerably. The notion that parents are, and should be guided to become more fully responsible for their children's educational outcomes was nascent in the New Labour strategies to tackle the causes of poverty but had an arguably softer edge than the later Coalition and Conservative perspectives on parental responsibility. The New Labour policy intention can be summarised as providing:

> the support that families need to move into work… to focus effort and resource to close the gaps in opportunities and achievements for poor children…[and] On the other side of this contract, we look to families to make a commitment to improve their situations where they can, to do the best for their children's well-being and development, and to take advantage of the opportunities on offer (CPU, 2009, p. 6).

This policy was based on the "Gregg model of conditional support for parents" (CPU, 2009, p. 11) where conditions, or expectations, are placed on claimants receiving benefits. Gregg (2008) explains the rationale behind the policy of personalised conditionality and support as a means of changing behaviours, reducing reliance on benefits and as a means of cost saving in a growing welfare system. The 'personalised' part of the conditionality it involves recognises that some people require more support than others, for example to access paid employment. Similarly, there was a recognition that some parents could find supporting their children harder to achieve than others and therefore parents were expected to help their children "as well as possible" (CPU, 2009, p. 15). The parents of children eligible for two-year-old FEL places would be considered to be at risk of experiencing multiple difficulties and thus recognised as potentially needing more support themselves and/or support to help their children.

In the initial pilot that developed from the Labour Government *10 year strategy for childcare* (HMT et al., 2004, p. 2) the emphasis was on parents making the right choices according to their specific family circumstances, for example, "striking the right work and family commitment balance" and placing parents as "the best judges of their family needs". One of the original intentions of the two-year-old FEL initiative was to support better relationships between children and parents and to support the emotional

well-being of parents (Maisey et al., 2013). This was intended to develop parents' ability and also their capacity to support their children well.

Following the change to a Coalition Government, the two-year-old FEL initiative was integrated into the aforementioned policy of a 'life-cycle approach' to social mobility (HMG, 2011b). There emerged a far greater emphasis on parental responsibility rather than parental choice. Under the Coalition Government two-year-old FEL was now seen much more strongly as a means of early intervention to raise educational outcomes for this group of 'disadvantaged' children and a statutory duty was introduced in 2012 for EYFS providers to carry out a two-year-old progress check. The statutory duty entailed providers informing parents when their children were not operating at age-related expectations and putting strategies in place to work with parents to help children catch up. Therefore, if parents exercised their choice to access a two-year-old FEL place for their child, they were expected to be engaged in their children's learning as described in the EYFS.

As can be seen from the quote at the beginning of this section, conditions were always in place according to the abilities of parents to help their children. Although arguably the New Labour policy was itself heavily laden with a discourse of responsibility and helping parents to make the 'right' choices, with the change to the Coalition then Conservative governments the conditions have become expectations. The shift in the two-year-old FEL policy introduced by the Coalition Government and extended by the Conservative Government was characterised by a much stronger expectation that parents would use the opportunity provided by a free place to prepare for and access paid work, thereby becoming less reliant on state benefits (HMG, 2013) and thus producing a double dividend and an example of quality expressed as efficiency.

The Fairness Premium (HMT, 2010) introduced by the Coalition Government in October 2010 co-opted and intensified the original two-year-old FEL strategy by providing additional places for 'disadvantaged' two-year-olds. However, the Coalition Government's Social Mobility Strategy (HMG, 2011b), launched in April 2011 had a different emphasis to the work started by the

previous government. It was in a joint policy paper produced by the Department of Work and Pensions (DWP) and the DfE where the policy to offer FEL places to disadvantaged two-year-olds was openly acknowledged as important to the strategy of getting more people into work. The paper asserted that the focus was on "fairness and personal responsibility" and ensuring "that families can work themselves out of poverty" (HMG, 2011a, p. 3). Thus, responsibility for ensuring social mobility became understood as the personal responsibility of individual families.

In July 2015 the Conservative Government published *Fixing the foundations: creating a more prosperous nation*. In this document (HMT, 2015, p. 53) the two-year-old FEL offer is firmly positioned as a means by which the Government might provide "significant support to help parents enter and stay in work". Further, that support is balanced by an expectation that parents will meet their side of the bargain as "From April 2017, parents claiming Universal Credit will be expected to look for work from when their youngest child turns 3, and to prepare for work when their youngest child turns 2". The new focus on expecting parents to use the free childcare to find or prepare for employment brings an additional perspective to the two-year-old FEL strategy which is now acknowledged to be serving a dual purpose of improving school readiness at the same time as encouraging more mothers into work. I understand this dual purpose as being split between early learning serving an 'educational' function, and it serving an employment function, as a form of childcare, allowing parents to go to work unimpeded by their children during school hours. Such dual purpose could potentially create a source of tension between meeting the different requirements of parents and children. For example, parents may need longer sessions to cover training or work commitments, whereas shorter session times might be more appropriate for young children leaving parental care potentially for the first time.

5.3.2 The correlation between disadvantage and poor outcomes
Finally in this section I want to consider the relationship that I believe has formed in the public consciousness between the concepts of poverty (now termed disadvantage) and poor outcomes, and how this may have

developed since the start of the two-year-old FEL pilot in 2006 to the present day. From a critical complexity perspective it is understood that once an action or change is introduced to a system it can react in unexpected or unintended ways within that system and beyond. Morin (2014, p. 19) termed this phenomenon "the ecology of action" (see section 2.4.1) and it is this concept that supports my perception of the way that Free School Meals (FSM) appears to have changed its status from being a poverty indicator to becoming a definition of disadvantage and a high risk factor for poor educational outcomes.

Following the direct causal logic of the life-cycle approach, the solution to improving educational outcomes is to identify the children most at risk (those experiencing poverty), implement an intervention for them such that children catch-up with their more advantaged peers and become ready for school, which should then result in improved educational results. 'Disadvantaged' children (deemed at risk of poor outcomes) are identified via their eligibility for FSM and their progress and attainment is a focus of the Ofsted accountability process. A critical complexity view of this strategy suggests that an unintended consequence of the focus on FSM is that it has contributed to a direct correlation in the public consciousness between poverty and poor outcomes. I argue that this has come about in a similar way to the neuroscientific messages I referenced in section 4.1.2. Through frequent repetition, strong feedback loops carrying information about FSM and poor outcomes throughout the system have grown and become a strange attractor, enabling the message to gain credence

The original reason for using FSM as a proxy indicator for poverty was probably pragmatic in that this data was already being collected so no further costs would be incurred. Further, historic data is available making comparisons possible where new initiatives had been introduced. Such arguments are made by Harwell and Le Beau (2010) in the US context and by Gorard (2012) in the English context, suggesting that this kind of strategy could be more widespread globally. Nevertheless, it is recognised that the FSM data can only be an approximation of which children are vulnerable to poor outcomes. For example, in the Ofsted survey *Unknown children –*

destined for disadvantage? (Ofsted, 2016b) it is acknowledged that some children who might be described as 'disadvantaged' or 'vulnerable' will not be eligible to claim FSM. Equally, there is other research (Pascal, Bertram, Delaney & Nelson, 2016; Siraj-Blatchford, 2010) that focuses on 'working class' children (who may be eligible for FSM) who have good educational outcomes. Therefore I argue that FSM is being used by policy makers as a rough but easily accessible proxy measure. However, its use as a proxy measure has taken the appearance of a direct causal link with the risk that it creates taken-for-granted assumptions about the children and families eligible for two-year-old FEL places.

5.4 Chapter conclusion

The two-year-old FEL initiative is positioned to serve the dual purpose of improving academic outcomes *and* increasing the participation of women in the workplace. Both of these functions are deemed important for the financial prosperity of the UK according to recent government policy (HMT, 2015) and are part of a quality agenda characterised by efficiency. 'Care' and 'education' appear to have different emphasis in what is claimed to be the same inspection framework for providers in both the school and PV sectors and it is likely that this situation could be producing different practices and therefore different outcomes in the two sectors. The high stakes accountability approach present in the school system, has resulted in schools paying much attention to measuring and tracking children against developmental norms. In complexity terms this could be described both as the effect of the ecology of action on the different sectors and as a case of complexity reduction on the school sector.

Tracing the history of the two-year-old FEL initiative has highlighted the changing messages about poverty, parental responsibility, school readiness and social mobility. 'Disadvantage' is increasingly being perceived as a major risk factor with regard to children's academic outcomes by those pushing for FEL at a policy level. What was seen as a problem with multiple causes and multiple consequences under the Labour government is now seen as part of a 'life-cycle' approach following a more linear logic under the

Coalition and Conservative administrations. Further, the strategies of measuring and reporting on outcomes for 'disadvantaged' children and of continuously repeating messages as undisputed truths (as I discussed in Chapter Four), appear to have caused strong feedback loops in the education system that have formed a direct correlation between 'disadvantage' and poor outcomes.

Parenting style is positioned as both a risk and a protective factor in terms of children's ability to achieve good outcomes in a way that risks pathologising some forms of parenting. Taking into account their dual roles as parents and as workers, parents are being co-opted by state and educational agencies such that it is not only the conduct of their children, but their own conduct that is being shaped according to an overall logic that is not exclusively 'educational' in the broad sense of the word, but is also attached to a Department of Work and Pensions (DWP) agenda.

At the beginning of this chapter I cautioned that it could only ever be viewed as a snap shot of the current English education system, coloured by my own particular perspective. In the next chapter I introduce my cases and particularly look at what is being valued in each school system and thus how the notion of quality is being framed. Over chapters Six and Seven I explore how the themes introduced in this chapter of i) childcare and education, and ii) poverty, school readiness, the role of parents and social mobility influence how quality is perceived by individuals and within school organisations.

Chapter Six – Context and Cases

According to my conceptualisation of critical complexity, to begin to understand an open system and its behaviour, context must always be taken into account. Chapters Four and Five consider the context within which my case, the LA in which I work, is nested. In this chapter I share the contexts of the four purposefully selected case schools that are themselves nested within the LA whole. I draw on the concepts of recursivity, namely the idea that we are both products and producers of our environments, and of the holographic principle, which is the idea that phenomena present at one level of a system can be replicated at other system levels, to explore how ideas about quality and the purpose of the two-year-old FEL initiative are distributed throughout the school systems. A critical complexity understanding of system behaviour means that I would expect to find multiple and multi-layered interpretations of the concept of quality in provision for two-year-olds at LA level, at school level and at the level of individual practitioners. This is because of the different ways that systems interact in unique ways with the internal and external systems to which they are connected.

As I explained in my methodology chapter, it is not the intention of this research to arrive at a reductionist or simplistic explanation about which methods of providing two-year-old places are most appropriate or effective. Instead my aim is to investigate how, as a society, different understandings of quality have been reached. The following quote supports me to think about how I aim to analyse and present my data in a non-judgmental way:

> The ethics of understanding is a refinement that begins with disinterested understanding. …. The ethics of understanding demands that we discuss and refute instead of damning and excommunicating. …. Understanding neither excuses nor accuses. It teaches us to refrain from condemning hastily, irremediably, as if we ourselves had never erred (Morin, 1999, p. 52).

Morin's quote helps me to reflect on my position as researcher and particularly how, when taking a meta-viewpoint, I need to be aware of my own positionality. It also reminds me that the complexity present in systems

and the power expressed in some aspects of system behaviour means that there may be multiple influences acting upon individuals and groups, and that choices and their consequences are not always easily controlled by those making decisions at local level. Further, as Byrne (2005) claimed, there could be many ways to achieve similar outcomes and no one-way of doing things.

Therefore, I begin this chapter by considering the motivations of each school as a way of thinking about what is valued in each school system and the internal and external influences that might have impacted on decisions to take two-year-olds. I then offer four vignettes of how each school prepared to offer places for these younger children. The aim of the vignettes is to provide a richer context for the information shared at the beginning of the chapter about motivations and what is valued in each school. They also set the scene for exploration in the next chapter of how ideas about quality were presented in the interviews and specifically the themes identified in Chapter Five of poverty, school readiness, the role of parents and social mobility.

Figure 6 is a table displaying the seventeen participants, the schools they belong to, job roles as they were described in the interview, qualification levels and whether those qualifications included working with two-year-olds. The names of the schools and participants are anonymised. The table also illustrates some of the key similarities and differences between school contexts.

Throughout this chapter and the next I will be referencing a study by Georgeson et al. (2014) *Two-Year-Olds in England: an exploratory study.* The research took place at the same time as mine but was much broader in scope. It involved two phases. The first phase was a review of the literature on dimensions of quality that are considered to be important for two-year-old's development, an exploration of current local and central government policy and practice relating to two-year-old provision, and interviews with thirteen key informants chosen as representative of the whole ECE sector; private, voluntary, independent and maintained. The second phase built on findings from the first and included a national online survey that generated

responses from 509 participants that were able to be used in the data anaysis. Eleven settings (ten of which were visited) from four local authorities were then selected in order to produce case-studies "to offer illustrative examples of how providers are approaching their work with two-year-olds" (p. 33). The visits were carried out in the Summer term of 2014 which was the same time that my interviews took place.

I would argue that Georgeson et al.'s research questions and interview questions have more similarities to mine than they have differences. For example, my interview schedule (see Appendix 2) seeks remarkably similar information to Georgeson et al's online workforce survey (2014, p. 32) where they ask about participant's qualifications, experience, views on preparations for taking two-year-olds and what they considered to be important considerations in terms of quality provision for two-year-olds. Where I believe my research questions differ significantly is that in my main research question (see section 1.3) I ask, "how as a society did we arrive at these understandings?" Like Georgeson et al. (2014, p. 11) I was interested in exploring "current …frameworks and practices". However, to answer my research question I also needed to explore the trajectories or histories of these ideas both to understand the current context and to recognise where potentially sedimented and multiple understandings existed. From a critical complexity viewpoint, I regard these two examples of research into quality for two-year-olds to be an example of Human's (2015) argument that I referenced in section 2.5.4. Namely, that if a researcher had chosen differently or had a different researcher studied the same things, then different perspectives would produce different outcomes.

6.1 Rationale for taking on two-year olds

If Penn's (2011) argument is accepted that ideas about quality in education are driven by values and what is believed to be the purpose of education, it follows that at an organisational level it would be important to understand what motivated each school to provide two-year-old FEL places. In Chapter One I raised the question: As implementation of the initiative was, and remains, an entirely optional activity for schools, why would a school choose

School and description of two-year-old provision	Position of individuals who agreed to be interviewed (as described by participant)	Qualifications (as described by participant) *Relevance to two-year-olds.	Name of participant
Maple Academy Two-year-old nursery in separate building (off-site).	EYFS Leader	B.Ed	Lizzie
	Class teacher – Leader of Nursery	Early Years BA (Hons) + QTS (3-7 years)	Ellen
Sycamore Primary Rising threes incorporated into 3-4-year-old nursery provision (1:13 ratio) and sharing outdoor space with 3-5-year olds.	Headteacher	B.Ed (Hons), Post-graduate certificate in Leadership & Management, NPQH	Tabitha
	Foundation Stage Leader	BA (Hons) + PGCE	Jenny
	Teaching Assistant	Early Years Level 3*	Kate
	Teaching Assistant	Level 3 Teaching Assistant	Ryley
	Nursery Teacher	B.Ed English with QTS (3-8 years)	Florence
Oak Primary Two-year-olds in separate room, adjoining the 3-4-year-old nursery with small, separate outdoor space and sometimes sharing the larger outdoor space with 3-4year olds.	Headteacher	BA (Hons) + QTS	Oliver
	Phase Leader (2yr olds to Y1)	BA in Outdoor Education & Geography, PGCE (KS2) (Working towards MA in Early Years Education).	Chris
	Head of 2 year room	NNEB*	Kay
	Early Years Practitioner	NNEB, NVQ4 Childcare & Development*	Beth
	Early Years Practitioner	BA Early Childhood Studies* EYPS*	Lorraine
Willow Academy Two-year-olds in separate room and with separate outdoor provision. The school has taken over an established Children's Centre nursery affected by funding cuts.	Assistant Headteacher		Helen
	Room Leader (TA Level 4)	NVQ Level 3 in Early Years Education*	Claire
	Teaching assistant	Cache Level 3 Diploma in Childcare & Education (birth to 18)*	Joanne
	Teaching Assistant	Level 3 Teaching Assistant	Michelle
	Teaching Assistant	BA Early Childhood Studies (Working towards Diploma in educational Psychology)*	Laura

Figure 6: Table of schools involved in the research with participants, job roles and levels of qualification

to have two-year-olds? It is worth noting here that as early adopters of the two-year-old FEL initiative, with the exception of Sycamore Primary all of the schools had to negotiate what they described in interview as a time consuming and difficult Ofsted registration process (mainly because the Ofsted bureaucracy was not set up at that time to deal with schools as nursery providers for under-threes). According to the accounts of the senior leaders, it took a lot of tenacity and resolve to persevere with the process and achieve a successful registration. Therefore, as key decision makers, I would expect that school leaders saw some benefit in pursuing registration which might be to children and/or to the school.

In the following accounts there is a strong sense of a value-based understanding of quality where efficiency and effectiveness are prioritised. This means that attention is paid to managing costs, reducing waste in the system and achieving the best outcomes possible with the money available (see section 4.2.4). At Sycamore Primary the reasons given were firstly financial (managing costs) and secondly about retention of children (reducing waste) throughout the EYFS and improving EYFS Profile (EYFSP) results:

> You've got be sure that it's not costing you money, definitely. And for it to be of benefit to the school you want most of those children feeding through into your Reception class.
> (Tabitha, Headteacher at Sycamore Primary)

The move to offer full-time reception class places to all children from the September of the academic year that children become five-years-old has had the unintended consequence that many schools struggle to fill their nursery places in the Autumn term. Such unintended consequences could be explained through the concept of the "ecology of action" (Morin, 2006, p. 21) Where new ideas, or in this case actions, are introduced to a system, the system reacts to the many choices available within the system in a way that is not easily predicted or controlled. When Tabitha arrived at the school as the new headteacher she found that approximately £7000 was being clawed back from the school budget because of empty places in nursery. Taking eligible children a term earlier, potentially on the same 1:13 ratio and using

existing staff was seen as a way of increasing efficiency and alleviating the financial problem.

At Willow Academy the new leadership team were being tasked with making improvements to the EYFS in order to improve school results and their Ofsted rating:

> With the Children's Centre becoming vacant and available it just made so much sense to move the two year, three to four-year-old nursery down into there and create a, you know, really good space for them. So partly it was to help out shall we say, with the Ofsted and again, it was the two-year-olds that were there and, you know, it just made sense to, to take them on really.
> (Helen, EYFS leader at Willow Academy)

Here there is a sense that taking two-year-olds was deemed a logical thing to do as it was expected that doing so would help improve their EYFSP outcomes, which indicates a production-based understanding of quality. Like Tabitha, Helen also expressed views about retention, making it clear that the school wanted to see a return for its investment. Again, a multi-layered view of quality is apparent drawing on ideas that are value-based and production-based:

> you're hoping that those children are going to come into three-to-four nursery and then you're hoping to retain them really in through to school as well aren't you? So it's sort of catching them early and putting any early intervention in and hopefully they'll have a successful sort of early start in their nursery career and school career and hopefully that should all be positive for school as well really in the long run. So I think for the children and for school it should be a win-win situation really.
> (Helen, EYFS leader at Willow Academy)

At Oak Primary they were fully aware of the costs "making sure that financially it will cover itself, because, obviously, as a school it's a big thing to take on" (Chris, EYFS leader). Like Willow Academy they identified the benefits for children and at the same time they were not blind to the potential benefits the school might enjoy:

> Yes, it's benefiting the children but we're wanting it to benefit the school eventually. For those children to actually be coming in and moving along much quicker.
> (Chris, EYFS leader at Oak Primary)

In both of the last two examples the image of a race is used – catching children early and moving them along more quickly which resonates with the metaphor of the 'global race' used by the DfE (2013b) in the document *'More Great Childcare'*. It could also be argued that this race metaphor is an example of the production-based understanding of quality that I explored in section 4.3.1 and will consider in more detail in relation to the case schools in Chapter Seven.

Finally, at Maple Academy the plans to have two-year-olds were in place before Lizzie, the EYFS leader joined the school. Here are the reasons that she thought were in play:

> It's just a need in the area. We've got, you know, a lot of families who, that looking at the starting points of our children from three, if we can get in there a little bit earlier, you know, hopefully, by the time the children are hitting three then there won't be those, you know, huge gaps.

In each school's rationale the impact of accountability processes is evident and there is a data-driven undercurrent of preparing children for school, improving outcomes and meeting Ofsted expectations. I consider this to be a strong example of recursivity in the education system where ideas travel between parts of the system with the impact that the people working within the school rganisations become both the product and producers of their environments. It is also clear from these responses that to a degree, school organisations think and act like businesses. Balancing the books is important, as is seeing a return for investments.

In Georgeson et al's study (2014, p. 95) they claimed:

> Settings' understanding of quality in provision for two-year-olds was shaped by their general ethos, their interpretation of 'child-led pedagogy' and their motivation for offering funded places, for example, by prioritising children's independence, ensuring a service to the community or working on inclusion.

My findings contrast somewhat with those of Georgeson et al. My understanding of critical complexity and particularly that of feedback loops that react and retroact means that in addition to considering the views of the schools in my study in the way that Georgeson et al. do, I also believe that

my schools' motivations for offering the funded places has impacted on participants' understanding of quality and thus how they have shaped their provision for two-year-olds. I therefore believe that perceptions of quality are layered, sedimented and sometimes contradictory and cannot be considered as a straightforward linear process.

To conclude this section I explore ideas about the purpose of the two-year-old FEL initiative from the viewpoint of practitioners not in senior management roles. Chapter Five introduced the themes of 'childcare' and/or 'education' that run through the history of the two-year-old FEL initiative. Although some practitioners such as Ryley (see section 6.2.1) recognised that these children required more nurturing and support with personal care, what is clear to me is that through all seventeen interviews, 'education', interpreted in the narrow sense of 'learning', was the primary reason given for offering two-year-old FEL places with the intention of improving school stability in terms of results, Ofsted outcomes and financial security. I consider this as an example of the holographic principle, where the same phenomena are present at different levels of a system.

Existing alongside the rationales presented by leaders for offering places, the next two examples illustrate individual attitudes to the purpose of offering two-year-old FEL places that draw on ideas about parental involvement and responsibility and will be expanded in Chapter Seven. Ellen had quite firm views about the purpose of the two-year-old FEL places in school and about the roles and responsibilities of parents whose children were fortunate enough to secure a place. Here she describes an interaction with a parent who felt that he (not his child) needed a longer session:

> I said to him "Oh, he's had a lovely time"…And he said, "Yes, well if you ever do full days we want full days because three hours is here nor there to us for a rest". And I kind of my blood boiled, my blood boiled a little bit. (laughs) Erm, because I kind of thought, "Mmm, we're not here. This is not about a childcare"…I, I feel that they've almost been given a, a privilege in, they've been give an opportunity. We've got a girl down the road who I know who would relish this experience, would love to come into nursery that little bit earlier but doesn't qualify and the parents can't afford, working but can't afford to send her to a private nursery…that that kind of angers me a little bit.

(Ellen, senior practitioner at Maple Academy)

It was not made clear why Ellen felt so strongly about this parental request but in this excerpt she makes it clear that she believes that the purpose of the two-year-old FEL provision is "not childcare". For Ellen the purpose of the two-year-old FEL initiative was primarily about education and closing the attainment gap between these children and their more affluent peers – a production-based understanding of quality for those two-year-olds. The above quote indicates that she saw the parental role as one of responsibility in terms of supporting their child's education. The way she perceived the purpose of the two-year-old offer informed the way she developed the provision. During the interview she referred to her parenting of her own two-year-old and the differences between the level of conversation that was able to take place in her daughter's nursery and the poor language levels in Maple Academy. Ellen displayed a keen sense of social responsibility because "it shouldn't be different" and therefore said she was prioritising language development.

In contrast, Kay at Oak Primary was unusual in her comments about parents needing time out from the difficult task of being a parent, essentially a time to regulate their own emotional states in order to be more effective parents when they are with their children. This idea resonates with the original purpose of the two-year-old FEL initiative as it was expressed by the last Labour Government (CPU, 2009). However, Kay attributes her philosophy to remembering how hard she found it to parent two young children (one with additional needs) and how she appreciated the support she had. Although it was not the primary intention of her school, Kay brought her own additional understanding of the purpose of the two-year-old FEL initiative to the context of Oak Primary. This aspect of her understanding of the purpose of the two-year-old FEL initiative might be best described as aligning with a multi-perspectival view of different stakeholders (Katz, 1993) that I discuss in section 4.1.1. However, as will be seen in Chapter Seven, Kay held this understanding alongside other more widely held views about quality that existed within her organisation and is therefore an example of a person holding a multi-layered and sedimented view of quality.

having a two-year-old setting is a break for the children…and then also it's a break for the parents…from the pressures of being a parent to that child. Some parents don't know how to parent…it's confusing and it's stressful so it's three hours a day away from that stress to just you know, be calm and do what they need to do to be 'a person' and then you know, get their children back. So, that, I feel that setting, it's not just for the children, it's for the family unit.
(Kay, senior practitioner at Oak Primary)

The different reactions of these two practitioners (and the fact that I took notice of it), can be understood through Morin's notion of recursivity; that we are both product and producer of our environments. Each person within a school system brings their own experiences and beliefs to that system which then interacts in unique ways with other internal and external influences. It reinforces my understanding of the inseparability of the separable and reminds me that even where research such as the EPPE study (Sylva et al. 2004a) attempts an ecological framework to account for the many variables present in a system, this is essentially an impossible task.

It appears that contextual factors such as financial instability and concerns about data and accountability processes have strongly influenced leadership decisions. Although taking two-year-olds has always been an optional activity, it seems that to different extents leaders may have felt their choices to be limited and in all of these cases taking on two-year-olds seems to have presented to leaders as the sensible thing to do. Biesta's (2015) argument about the impact of accountability measures (see 5.2.1) has relevance here and it is worth considering whether when schools make the decision to offer places for two-year-olds they think about the potential impact of the initiative beyond the hoped for improvement to school results. For example, at Sycamore Primary, had it not been for the financial situation Tabitha inherited she may never have considered taking on two-year-olds at all. However, Tabitha's pragmatism of filling places to alleviate the school's financial troubles may have risked her losing sight of the broader educational picture.

In the following vignettes I hope to demonstrate the complexity of each team, taking into account prior work and personal experiences of two-year-olds as well as other organisational influences on the work of individuals and teams.

What emerges from the vignettes is that despite differences between schools, in each one there is a focus on academic outcomes and readying children for the next stage of their education that is remarkably similar. However, the approaches to forming teams to work with two-year-olds in each school are quite different in terms of leadership, team size, combinations of new and existing staff, experience and qualification levels within the teams, and whether the team was fully formed from the beginning and built-up to the maximum staff-child ratio or whether it started small and grew as the numbers of children increased. My intention here is to highlight that there are differences in context that could potentially result in different outcomes and not to point out ways of forming teams that in my opinion produces the best results. Nevertheless, it is worth remembering Byrne's (2005) claim that different paths can be taken to achieve similar outcomes and similar paths can result in very different outcomes.

6.2 Preparation for working with two-year-olds

A total of seventeen interviews (see Figure 6) were held in four schools at a time when there was a great deal of change in the school system notwithstanding the delivery of two-year-old FEL places. Of the seventeen interviewees only seven had any qualifications that related to working with two-year-olds of whom just six had any prior experience of working with that age group. Ten of them mentioned having had parental experience of the age-group. It is a matter of debate whether or not having senior leaders shaping practice and senior practitioners leading day-to-day-practice who are for the most part inexperienced and unqualified to work with two-year-olds would be classed as a disruptive innovation at the local level.

The EYFS leaders in each of the four schools had been in charge of the preparations to take-on two-year-olds. However, in each school those preparations were set amongst many other initiatives and responsibilities. In both academy schools the EYFS leaders had non-teaching roles. Helen, the EYFS leader at Willow Academy had just taken on an Assistant Head role and was responsible for two schools in the academy chain, each with two reception classes and thirty-nine place nurseries for three to four-year-olds.

As well as recently taking over Willow Academy, the academy chain had acquired a Children's Centre nursery on the same site that had closed due to funding cuts. A relocation of the school's nursery provision, a £10,000 refurbishment and taking on any remaining nursery staff was part of this work.

Lizzie, the EYFS leader at Maple Academy was responsible for three reception classes, a seventy-eight place nursery, plus a separate off-site nursery building which the school had historically struggled to fill. The decision to offer places for two-year-olds was set against a backdrop of uncertainty as the fairly recently appointed head (who had agreed to be interviewed) resigned as the Academy took-over. A key concept in complexity theory is that parts of open systems interact in sometimes unexpected and unintended ways. For example, when I selected my four schools and approached the headteachers for permission to conduct interviews, I could not have foreseen that two of the headteachers would have moved on before the interviews took place. Nor could I have predicted that one of the schools would be taken over by the same academy chain and leadership team as another of my chosen schools. As the interviews were taking place, Lizzie was receiving some support and advice from Helen, the EYFS leader at Willow Academy. Had I known they would become part of the same Multi-Academy Trust I might have selected a different school for my study. However, it provides a good example of how systems can continuously change, connect and influence each other.

Jenny, the EYFS leader at Sycamore Primary had a substantive role working part time with the older children in a unit with forty-five reception and twenty-six nursery places. She had recently taken on a temporary Deputy Head role which meant that she was no longer classroom based. Chris, the EYFS leader at Oak Primary had a substantive role working part-time in a thirty-nine place nursery, with management responsibility over two reception classes and two year-one classes. At the time of the interviews Chris had just taken on additional temporary responsibility as Special Educational Needs Co-ordinator (SENCO) to cover a maternity leave. This also took her

away from classroom teaching and extended her responsibilities throughout Key Stages One and Two.

Interviews with the EYFS leaders demonstrate that at the time their roles were multi-faceted and subject to continuous change. My analysis of the situation is that school circumstances as well as personal knowledge and interest in working with two-year-olds impacted in different ways on their capacity to do as Wilshaw (2014) suggested and 'lead' practice.

6.2.1 Sycamore Primary

At Sycamore Primary interviewees gave a strong sense of this initiative being taken on in a hurry and without a lot of planning:

> We were just told erm I think it was the Easter term that we had two Early Risers coming in…and then we were just pretty much informed that as of September we were going to be as full as possible and where we couldn't fill up with three year olds we would be filling up with two year olds.
> (Florence, senior practitioner at Sycamore Primary)

As new cohorts of three-year-old FEL children started in the nursery the team's approach was always to 'scale back' the provision. This meant that the selection of accessible resources was simplified and reduced so that children were not overwhelmed by choice. This could be interpreted as a case of complexity reduction at classroom level intended to make tidying away at the end of the session easier and with more predictable outcomes. The staff took the same approach to preparing for the children accessing two-year-old FEL places:

> because they'll be transporting… covering and all those schemas that they go through, we knew that we had to scale it back for a little while, train them up then reintroduce it. So, it's knowing to do things like that, but sometimes that comes with experience doesn't it?
> (Jenny, EYFS leader at Sycamore Primary)

None of the permanent members of staff had any experience of working with two-year-olds and Kate, the temporary, newly qualified, member of staff had only had a few terms experience as part of her work placement when studying. The teacher had come from working with Year One children for many years and had no experience of teaching in nursery or of providing a play-based curriculum. During the interview she admitted that she was

struggling to adjust to working with three-year-olds and that she was relying heavily on the expertise of Ryley, a TA who was in her second year of working with nursery aged children. The team was being supported by Jenny, the EYFS leader who was also learning as she went along and was focusing more on ensuring that Florence's practice with the three-year-olds was appropriate.

> It's just mainly been what I've read. You know, in terms of training and it's kind of been researching it on the internet really and finding what we can do as a school to change our provision.
> (Jenny, EYFS leader at Sycamore Primary)

Although the team felt it would have been beneficial, the school did not visit any other settings with two-year-olds or access any training. Ryley who appeared to be the most proactive and reflective with regard to meeting the needs of the younger children described referring to child development materials; "and like you read all your Early Years Every Child Matters, that sort of thing". Ryley's greater interest and involvement with the younger children could be interpreted as a result of the kind of education-care divide described by Van Laere et al. (2012) because she was given more responsibility for them whilst the teacher was taking more responsibility for the education (understood in the narrower sense of learning) for the older children about to transition to the reception class.

Florence described a much more ad hoc approach to preparation for two-year-old FEL children:

> As much as the deputy can she's tried to sort of support us but if we got stuck and needed things, but nothing structured…It's just been a bit of advice as and when we've asked really.
> (Florence, senior practitioner at Sycamore Primary)

Another thing that suggests the team did not plan specifically for the changes was that the different needs of the children, who were only one term younger than those they were used to working with, seems to have taken the team by surprise. Toilet training and nappy changing was a big issue, partly because the school had no specific facilities in place and partly because of the time it took away a member of the team from their other duties:

> I think I changed five children because they were wet through with the water and then two had pooed and one had weed and that were like all through both sessions…I think it took me half an hour that were, that were just out of my bit, do you know? …. When you're supposed to be getting em to… read and …
> (Ryley, practitioner at Sycamore Primary)

Other things that seemed to take the Sycamore team by surprise were the shorter attention spans of the younger children, the amount of nurturing they required and the additional supervision that was required to keep them safe in the outdoor area. This excerpt from Ryley's interview demonstrates the division of 'education' and 'care' roles that exists within the setting. The comment about the expectation to support the literacy development of the older nursery children reflects earlier comments made by leaders in terms of the importance placed on improving children's academic outcomes and strongly suggests a hierarchy of learning over care.

There was a big difference between the team members in their attitudes towards having the younger children in school. The responses below suggest that the team understood 'care' as something that is an age-related phenomenon rather than an integral part of education which, as Moss (2017) claims, perpetuates the conceptual and operational division between the two. Ryley drew on her experience of being a mum when she recognised the extra nurturing required:

> some of these need a lot of they need a lot of sitting down and like basically, like baby playing with them.
> (Ryley, practitioner at Sycamore Primary)

In contrast, Florence had very strong views about children attending nurseries:

> I wouldn't have sent them to any provision at two, no. I wouldn't have felt they were ready. I think there's a time for children to be in the home setting and there's a time for children to be at school and it's my belief that three's too young so. Mine actually didn't go to Nursery at three, they went straight into Reception.
> (Florence, senior practitioner at Sycamore Primary)

This example of a tension between personal views and school objectives was the only case that I came across in my sample. In Georgeson et al.'s study (2014) they also found some evidence of tensions between beliefs

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about children being at home with parents and / or attending settings as part of the early intervention agenda. Additionally, they found evidence of tensions "between child-led pedagogy and school readiness" (p. 97) which notably, in my small, totally school-based sample, I did not. Whilst this could be a result of the size of the sample or the specific contexts of the schools and participants in my study, it might be worth investigating whether in a larger sample of schools the school readiness agenda is accepted in a similar way by all practitioners.

Ryley's comments below, "I wouldn't know if that's how it should be" and "they seem to…" reflect an uncertainty about whether or not the provision they were offering for the younger children was appropriate:

> We've only got we've got five in and they have just integrated with everybody else and I wouldn't know if that's how it should be. They seem to have done well and they seem to be following the, the routines and all that sort of thing but I would say, like you say, we've just sort of come through with everybody else at the moment I don't think that it's been given that formal consideration properly.
> (Ryley, practitioner at Sycamore Primary)

What I think this vignette demonstrates is that the two-year-old FEL initiative was just one small part of the whole picture for Sycamore Primary. As I have already described, the new headteacher was busy trying to manage the financial situation of the school (which the introduction of two-year-old FEL provision would help to alleviate), the EYFS Leader had taken on a lot of additional responsibilities and the Nursery Teacher saw her priority as developing an understanding of her role in terms of the three-year-olds who made-up the greatest proportion of her class. This meant that the leaders may not have had capacity to spend a long time supporting what was in effect a very small part of the whole school system. One impact of this was that just as the practitioners had to learn and adapt as they went along, so it seemed did the children.

Georgeson et al. (2014) found that the majority of their large sample of participants (mostly working in non school-based settings) believed an optimal staff-child ratio with children accessing two-year-old FEL places was 1:3. The small number of schools in their sample were all operating on a

maximum 1:4 ratio. Notably, Sycamore Primary was the only school in my sample operating on a possible 1:13 ratio with the two-year-old FEL children which one might argue was making it difficult for staff to meet the 'care' needs of the younger children whilst also attending to the more 'academic' educational school expectations for the older children. Further research might be useful in schools taking children in the last term of their two-year-old FEL entitlement as this research has shown that doing so is relatively easy for schools to initiate without necessarily thinking about how they might need to change their provision and practice.

6.2.2 Willow Academy

Helen, the EYFS leader was the driving force in developing the new nursery provision at Willow Academy and she was very focused on how the new two-year-old provision should look. As well as the aesthetics, "Some of it was old and tatty, it looked like it had been there a long, long time" she wanted to ensure that the furniture was the correct height for the younger children in order that they could access resources and activities independently. Her other criticism of the existing environment that indicates the strong emphasis on improving educational outcomes was that "it didn't show the areas of learning" and her improvements to the provision focused on structural aspects of quality (see section 4.2), making the provision "fit for purpose, furniture and bringing it up to speed and making those areas". In section 5.2.1 I cited arguments made by Mathers et al. (2012) about the different outcomes produced by environmental audit measurements for younger and older children and how they correlated with Ofsted gradings. Helen's comments about making areas of learning appear to favour the understandings of quality for older children in the ECERS audits rather than those in the ITERS audits relevant for younger children. Again, it suggests a hierarchy of 'education' over 'care'.

In order to find out about two-year-olds and their needs Helen took several different avenues. She talked about her own research on the internet and she also discussed talking to staff. This involved synthesising information from practitioners who had originally worked in the children's centre nursery and trusted members of her other school team who had previously worked in

private nurseries. The biggest impression I gained from Helen's interview was that she was taking what one might describe as a 'common-sense' approach using the child development document *Development Matters* (Early Education, 2012) as her guide and working back from what she already knew about provision for three-year-olds:

> And it's really just looking at the EYFS and the sort of Development Matters and just thinking "What's that next step down?" really and "What should it look like?" "What are these children coming to us for?" really.   "What experiences do they need to have?" and then just putting all of those ideas in to place.
> (Helen, EYFS leader at Willow Academy)

Helen's pragmatism in developing her knowledge of working with two-year-olds is not unlike that described in Georgeson et al's study (2014, p. 91), "Where settings had not previously admitted two-year-olds, they have taken advantage of local support structures and training to inform their work". Although not working within a critical complexity framework, Georgeson et al (2014, p. 66) also acknowledge the temporal and situational complexity inherent in their case settings:

> Each setting has its own history that underpins its provision, its own motivation for taking funded two-year-olds, and its own set of constraints and affordances, which shape practice and inform decision making.

The concept of the ecology of action (Morin, 2006) supports my understanding that the outcomes of any such research into the development of two-year-old provision should always be considered in contextual terms. Context conditions the sources of the knowledge Helen gained, her prior understanding to which any new knowledge is connected and the school system to which she belongs. Although Helen's comment, "What are children coming to us for?" could mean that she was wondering about the purpose of the two-year-old FEL initiative in broader terms, my interpretation of the comment is that she was referring to what children need to be able to do in order to be ready for the next stage of their education. This interpretation stems from looking at the comment in the context of the whole interview which was very much focused on improved outcomes. I could discern similar ideas about working back from what three-year-olds need to

be able to do being echoed by other members of the team which is an example of the holographic principle (see section 2.5.2). For example:

> It's similar to the, what you did with the three-year-olds but just it's adapting it to meet the needs of the two-year-olds because obviously they're not at the same learning speed as the older ones. So it's just learning that things are taken back a level, stripped down a bit more, but not too different to be honest.
> (Michelle, practitioner at Willow Academy)

As Claire claimed in her interview, with the exception of a LA session for schools thinking about taking on younger children that she attended, there was no specific training about two-year-olds to prepare the rest of the team. Several team members described learning to operate within the expectations of the school as an organisation, as well as the team learning together as they went along; a kind of trial and error approach:

> I think we've all sort of done it together because the nursery only opened in the January as Willow Academy, so the staff that were here already were just learning themselves… they've supported us and we've been learning as we've been going along really.
> (Michelle, practitioner at Willow Academy)

What did seem to be helping the team was frequent 'mini staff meetings' where they were able to discuss things that were not working such as group times:

> In group times, at first we just kind of got given children, like mainly the children who'd formed a good relationship to you, but now we've slightly had to adapt that to ability groups.
> (Laura, practitioner at Willow Academy)

Again, these examples from Willow Academy demonstrate the academic focus that the schools in my sample have brought to provision for two-year-olds. In particular they exemplify a production-based understanding of quality in the way they enact the school readiness agenda, focusing on teaching specific content in small group situations to ensure children are meeting the expected milestones for their age and in order to prepare children for the expectations of the curriculum offered to three-year-olds.

6.2.3 Oak Primary

It had taken over a year to plan the two-year-old provision at Oak Primary and those plans included a protracted Ofsted application, visits to another setting to look at the environment, building work to the spare classroom to include a toilet and nappy changing area, and recruitment of the team. Oliver felt that his school had a very successful approach to developing the two-year-old provision because they had been able to start with a blank canvas unlike another school he had been involved with that had taken over an existing two-year-old nursery.

> We were fortunate because we were able to start from scratch and we, you know, I think that's what's been, that's what's been difficult for Chestnut School because they were sort of, they already had a room that was sort of already set up and I think the difficulty for them was actually making it fit for the purpose that it's now intended for. Whereas we were able to do that and we had that blank canvas. And I think that's the other advice I'd give to anyone - just start completely from afresh. Don't try mix and match, I don't think it works.
> (Oliver, headteacher at Oak Primary)

Chris, who project managed the development, asked for practical advice from the LA at a very early planning stage. Her research also included a lot of reading and a visit to a school with an established two-year-old nursery provision. Like Helen at Willow Primary, her strategy was to focus on structural aspects of quality; how the environment needed to look. However Chris also realised that creating the right kind of atmosphere was important too which is a process aspect of quality and one that I argue is a subjective rather than measurable aspect of quality.

> I also did a lot of reading about…what these children need and you know, in some ways I might have, if I'd not done that pre-reading, I might have gone for a nice bright environment and actually you need to talk about the wooden and the nice calming environment. You can add things into it but actually neutral. So when I was planning the room and to decorate it, we've actually gone for very neutral colours…..It's not so bright that it's actually confusing the children because they need a nice calming environment.
> (Chris, EYFS leader at Oak Primary)

Getting the right team was another carefully considered task. The school asked for support from another LA officer in order to make up for their lack of expertise when employing people to work with this younger age group.

Oliver was keen to explain the advantage of taking on an internal candidate as the manager, even if she needed some support within her new supervisory role and even though she had no experience of working with two-year-olds, because this person understood what was expected of employees within his organisation:

> I think by keeping Kay, or by installing Kay as the manager, that's been very useful because it's not a new person. She's a person who is Oak Primary School through and through and she has worked here for twenty odd years or something ridiculous like that. So she knows completely what I expect and what Chris expects, and there are some training issues along the way but she's got that very deep rooted understanding of, of what we perceive to be quality.
> (Oliver, headteacher at Oak Primary)

This situation could be viewed as an example of redundancy or complexity reduction that would allow headteachers such as Oliver to be confident that their school systems would have more chance of remaining stable. Although Oliver was the only headteacher to talk about the advantages of employing existing staff in this way, it is interesting to note that all of the schools utilised a similar strategy of employing existing staff as senior leaders in the two-year-old provision. The opportunity was missed in the interviews to explore whether or not complexity reduction was an intended consequence or an unintended consequence of other, perhaps financial, decisions.

Georgeson et al (2014) highlighted the manner in which settings considered the make up of their teams working with two-year-olds, combining individual practitioners with different qualifications, skills and experience to produce a complementary whole. In a similar way all members of the new team at Oak Primary expressed a sense of each person bringing different expertise and experience to the group and of learning from each other. They highlighted an advantage of having an existing member of staff as part of the team. Kay was a familiar face for the parents which made it easier to establish relationships with them:

> But we're learning to help each other you know, we've all got different experiences, erm and I suppose getting the balance of your team right. I think they thought quite a lot about the selection of us as a three. You know that we all have different qualities to offer really. That Kay knew a lot about the school and the surrounding area. She

knows a lot of the families, that you know, are revisiting us with their two-year-olds so she's a familiar face for the school and the families so that's, that's a nice element to the team. And then I suppose I'm young and not got as much working experience but I've got you know more educational experience with early years.
(Lorraine, practitioner at Oak Primary)

In comparison to the other case schools Oak Primary has fewer children who are eligible for free-school-meals and therefore its catchment area might be described as less deprived. In July 2014 when the interviews took place, there were some children who were eligible for the two-year-old FEL entitlement but the setting was not full to capacity. However, with the planned changes to the eligibility criteria in September 2014 to include 40% of all two-year-olds, including some from low-income working families, the demand in the area was expected to increase. My interpretation of the slow start was that it seemed to give the team a little breathing space before they got too busy – time to get to know one another, develop their ideas as a team and for Kay to start to get to grips with her new leadership role:

I am learning as I go and I am, I think as a leader you have to draw on everybody else's expertise. You can't be good at everything. So you see the skills that your other colleagues have got and, you know, you encourage them to erm, use them. So erm, Beth, she's very good, you know, she's very good at pastoral care and general, you know general duties and you know, she works well, she's a good team player. And Lorraine is good in small groups with er language space she's very good at drawing out language from children and erm, I'm an organiser. You know, so we sort of put those together …So you're drawing on people's strengths and making sure that you're promoting you know, you're promoting and you're giving them the confidence.
(Kay, senior practitioner at Oak Primary)

Like the practitioners in the other schools, the team talked about learning as they went along and learning from each other. However, two out of the three team members had a lot of previous experience of working with two-year-olds and they based their new provision on that experience. This contrasted with the practice in some of the other schools where they offered a 'scaled back' or simplified version of the three-year-old provision those schools were familiar with.

A more unusual professional development opportunity that Chris encouraged was for the staff team to attend a meeting at a local private nursery "so they

can at least sort of communicate with other practitioners and sort of share any thoughts, problems they've got". On analysis, another thing that stood out as very different at Oak Primary in comparison to the other three schools was that the team seemed to be very relaxed and confident, yet not complacent, about their practice. It meant that not only did they place emphasis on the physical environment promoting a calm atmosphere, but they also placed emphasis on the emotional environment. Kay described the team dynamics and its impact:

> I mean I am very lucky that I work with Lorraine and Beth and they're all of the same ilk as me. You know, we love our jobs. We just, every day we turn up and we celebrate our children and we just want to encourage them. And we take, we take away such great pleasure from every day, you know and we share it with each other and it, we, it's just a joy to work together. And I think when you all have the same thoughts it just works well. You gel together and, and then you've got settled, happy and enthusiastic children as well.
> (Kay, senior practitioner at Oak Primary)

I perceive the team dynamic at Oak Primary as an example of emergent behaviour. Together, the three practitioners with their different areas of expertise, operating within the school system and expectations, produced a whole that would have been difficult to achieve had one of the components been missing.

6.2.4 Maple Academy

Maple Academy had a spare building that they had identified for the two-year-old nursery but their application for some capital funding to buy suitable furniture and resources had caused delays in being able to open. In preparation, Lizzie accessed a session run by the LA for schools thinking about offering places. The school hired the services of an independent consultant and ex-Ofsted inspector to help them prepare for the registration process and ensure that they had all statutory requirements in place. Finally, they had a visit from another LA officer who helped them with their capital funding bid for which they used an ITERS audit (Harms et al., 2006) that Ellen, the nursery teacher said, "gave us a few pointers to get us going".

The school made a careful decision to have a teacher leading practice because the nursery was at a distance from the main school site. Ellen had

no prior experience of working with two-year-olds in a professional capacity, but had nursery experience and was the parent of a two-year-old who attended a private day nursery. After a very slow build-up, the work to open the nursery and the registration happened very quickly. Ellen and Josie, a teaching assistant who had previously worked alongside her in Maple Academy Nursery, had no time to prepare by visiting other provision or talking to practitioners experienced in working with younger children:

> That's what's worried me most because I feel like I've gone into this with, with my eyes closed really. I haven't had the opportunity as of yet to do, to have that experience to visit other nurseries… going into this from last year to now there's been, there's been very little but there are lots in the pipeline to happen this year. So I feel like this year it's going to be almost I'm going to learn on the job.
> (Ellen, senior practitioner at Maple Academy)

Ellen's survival strategy included "a lot of background reading" which included practical things such as "research in nursery websites looking for sample timetables, example planning".   Before opening the provision she discussed with Josie the type of provision they wanted to set up for the two-year-olds and their conclusion was similar to ideas in Sycamore Primary and Willow Academy; a simplified version of three-year-old provision:

> 'What do we want?' you know, 'What are we wanting to give these children?' …. I don't think, it's not massively changed from the three-year-old nursery in terms of areas. But, so to go with what they're, going on the three-year-old baseline and taking it back a step. So that's been a massive success for us.
> (Ellen, senior practitioner at Maple Academy)

Ellen recognised that she was going to be learning as she went along. This strategy was not unusual in my study and in Georgeson et al.'s study the manager of two-year-old provision in a primary school descrbed similar practice of learning from each other (2014, p. 90). In Ellen's case, she described how, whenever things went wrong during the daily sessions, she would reflect on them at the end of the day and try to find answers. The arrival of Denise, a teaching assistant who had previously worked as a nursery nurse in a children's centre and who had experience of working with two-year-olds was a very welcome addition to the team, particularly in terms of practical strategies:

> when Denise arrived at the beginning of September I, Josie and I said, "This is what we've got, but there's this side of things that we don't know about yet that we need to chase up". Things like, in terms of, the day to day running, nappy changes for example….: And Denise was brilliant because she was saying things like, "Have you thought about this? Have you thought about that?"... So we kind of used Denise as a source as well erm to help.
> (Ellen, senior practitioner at Maple Academy)

Being well aware that they were unsure of what they were doing, Ellen and Josie appreciated Denise's presence not only to point out any gaps in their practice, but also to reassure them when they were doing things well. Denise's presence was a form of security and comfort:

> when we get to the end of the day and Josie and I we're like "How did today go? What do we think? What about that?" Denise has been saying, "It's fine. It's been brilliant. They've done amazing". But Denise has come from a forty-one place nursery with babies to age five, the majority being two-year-olds. So Denise said, you know, "They're doing amazing". But you know, "They've had a really calm, really settled start". Erm, you know, "They're doing really well. It's lovely". Denise thinks it's brilliant (laughs).
> (Ellen, senior practitioner at Maple Academy).

Although Ellen did not have the experience of working with two-year-olds, like Kay at Oak Primary, she drew heavily on the expertise of other staff who did. In Ellen's case this was particularly in terms of setting up and managing the care routines such as nappy changing. Where Ellen brought her expertise to the situation was her understanding of school expectations. Her comment about "going on the three-year-old baseline and taking it back a step" also shows that she is very aware of where children are expected to be according to typical child development expectations as they start three-year-old provision and that was probably what she meant by "What are we wanting to give these children?" Again, there is evidence of multi-layered understandings of quality for two-year-olds where understandings based on children's physical and emotional 'care'needs exist alongside production-based understandings based on the school readiness agenda.

6.3 Chapter conclusion

Context is important for understanding why individual schools wanted to offer two-year-old FEL places and how they went about doing so. At school level

the wider leadership concerns and school priorities impact on how these places are offered. An example of the impact of context at classroom level is the way that the different staff-child ratios at Sycamore Primary affect how the two-year-old FEL initiative is experienced by staff and children. The reasons and weightings for taking on two-year-olds are slightly different for each school, ranging from financial reasons and retention of pupils, to improving results and Ofsted outcomes. According to the senior leaders interviewed, balancing the books is important in each of the schools and in some of the accounts there is a sense of weighing up the financial risks against the potential benefits to the school. In the main, and at least where leadership decisions are concerned, it appears that production-based ideas about quality and children's academic outcomes are what is 'valued' and have subsequently influenced the purpose and organisation of the provision for two-year-olds.

Critical complexity provides a useful framework for theorising why each school chose to provide places for two-year-olds and how they prepared for the changes. All of the accounts demonstrate the strong focus on academic outcomes and preparing, or 'training' children to become ready for school. My interpretation is that most of the schools were working within a complexity reduction framework and were focusing on achieving a common approach within the two-year-old provision that aligned with whole school policy objectives. However at Oak Primary, what Davis and Sumara (2008) referred to in complexity terms as 'diversity' within the system was being celebrated by the three practitioners working in the two-year-old room. Here the differences in skills and experiences between the team members resulted in what could be described as an example of emergent behaviour where each team member contributed to something that was bigger than the sum of its parts. The recursive and holographic principles are also evident in the vignettes. Recursivity can be seen in the way that previous life experience or experience of the existing school organisation informs practitioners' new practices. The holographic principle is evident in the way that similar ideas such as children's low baselines on entry are repeated through levels of the school organisation.

The vignettes of each case school describe different motivations and different ways of preparing for two-year-olds and in the next chapter it will be seen that the schools worked differently with them too. Chapter Seven explores the variety of ways quality was expressed by the interviewees in the four schools. In particular I explore the production-based understanding of education in terms of the 'input' part of the education process where I position the two-year-old FEL initiative.

Chapter Seven–Repair & Prepare

The motivations described for providing two-year-old FEL places and the preparations made to do so explored in Chapter Six show that, with the exception of Sycamore Primary, improved academic outcomes are the prime reason given. In all of the schools, production-based understandings of quality are evident as interviewees talk about catching children early, putting in interventions and improving outcomes. In Chapter Four I introduced the idea of a tripartite education process consisting of school readiness, what works and accountability measures. In this chapter I provocatively argue that the dominant production-based understanding of quality in education that is based on a rationale of statistical process control (SPC) has positioned the two-year-old FEL initiative as a school readiness 'workshop' where these young children are assessed, 'repaired' where necessary, and then 'prepared' for the expectations of the school system ahead.

I start this chapter by exploring interviewee responses to a direct question about how quality for two-year-olds could be described. Then I go on to consider understandings of quality that I argue are being put forward to legitimise early intervention strategies. The next section that I have entitled 'input quality' explores the concept of school readiness through the activities and experiences schools provide. I describe as 'repair' the intervention activities intended to remediate situations where children are found not to be operating at age-related expectations. 'Prepare' activities I classify as those intended to provide experiences that will ensure children know how to behave and what to expect in a school nursery environment, so that they are ready to make a flying start in three-year-old FEL nursery.

7.1 What constitutes high quality for two-year-olds?

Within each interview I asked participants a specific question about how they would describe 'high quality' for two-year-olds. The combined answers of all seventeen responses are presented as quantitative data in the form of pie-charts (see Figures 7 and 8). To make the charts easier to read I have separated the responses into 'structural' and 'process' aspects of quality that

Structural Quality

- Environment and resources (13)
- Choice and accessibility of resources (6)
- Access to outdoor play (5)
- Familiar objects and images in the environment (3)
- Safety of environment
- Welcoming to parents
- Resources to support gross and fine motor development
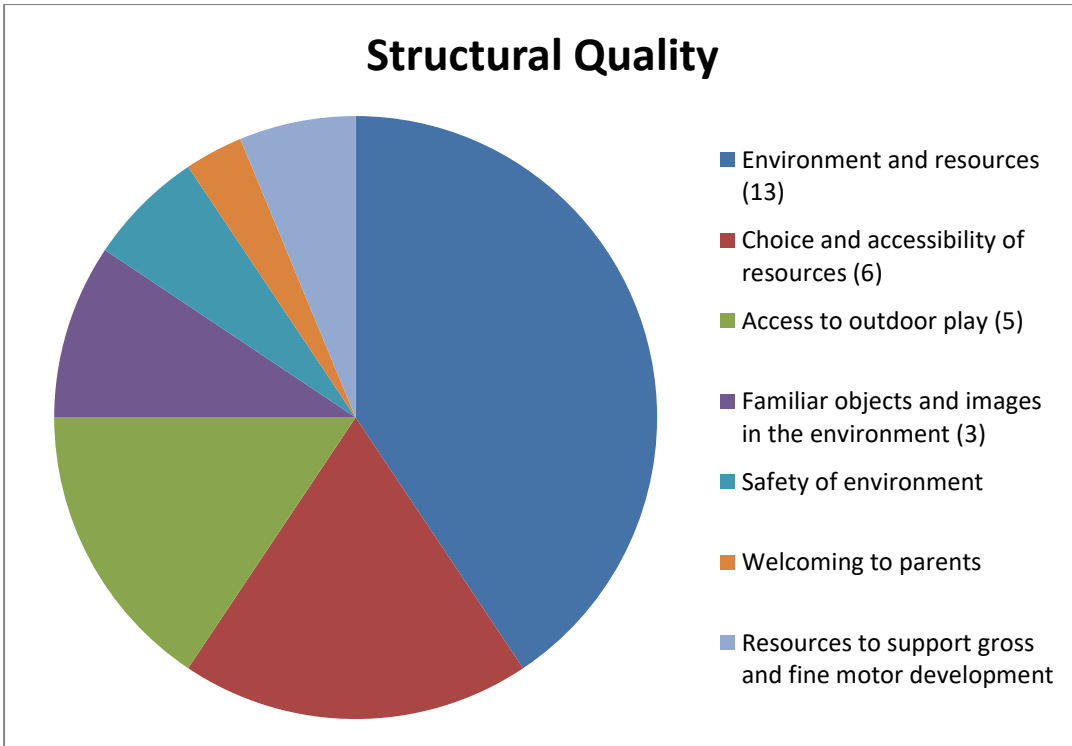
Figure 7: Practitioner's views on quality for two-year-olds – structural quality

Process Quality

- Staff skills and attributes (10)
- Play-based, child-led opportunities (7)
- Working with parents (4)
- Ability to progress children's learning (6)
- Importance of routines
- Activities to support PSED
- Support for language development
- Training children to put items away
- High expectations
- Learning in a domestic context
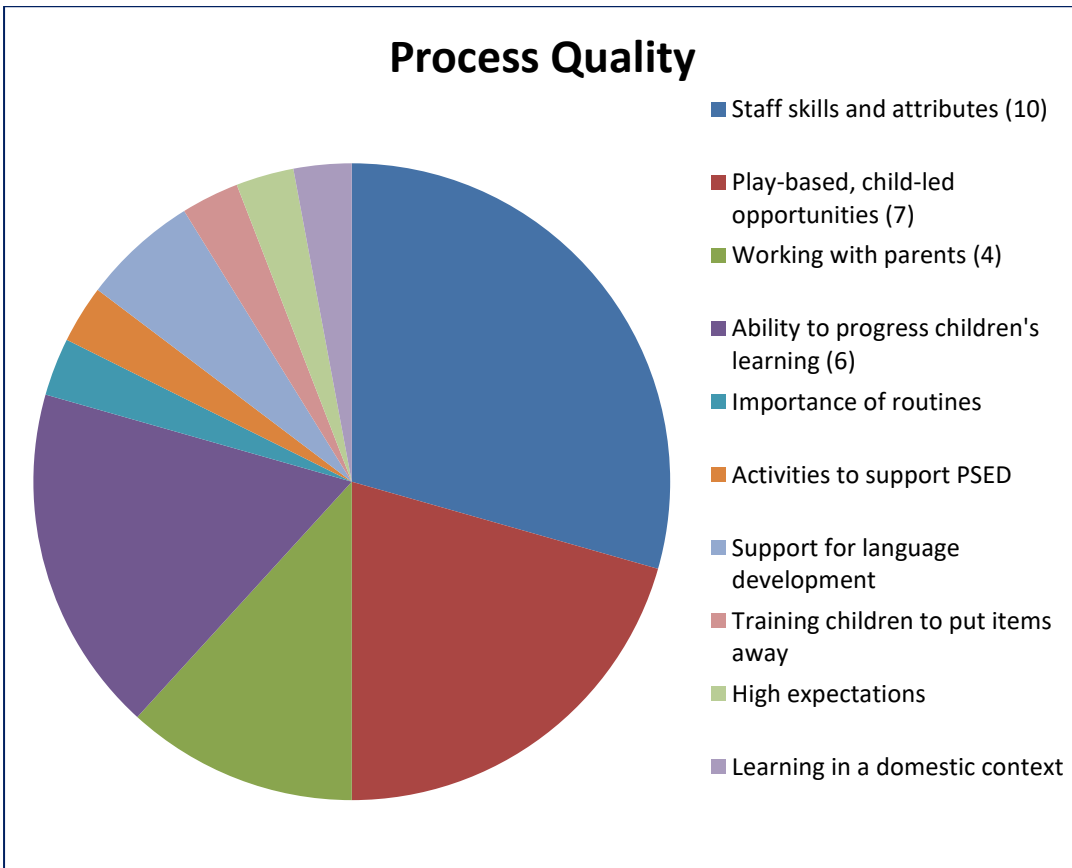
Figure 8: Practitioner's views on quality for two-year-olds –process quality

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I discussed in Chapter Four as aspects of quality that are considered to be measurable. I argued that although different aspects of quality may be presented as separable, in practice they combine in different ways and to different effect. Therefore I recognise that where interviewees offered more than one idea about quality, those ideas were likely to be intended as parts of a whole rather than discreet, separable aspects of quality. Using Garvin's (1984) terminology from a business management viewpoint, it is interesting to note that these ideas could all be classified as product-based understandings of quality where higher quality ingredients are thought to produce higher quality products or services - according to what is valued.

It is also notable that there were no responses to the direct question about quality that could be categorised as 'outcomes quality' which is an understanding that correlates to Garvin's (1984) definition of manufacturing-based quality and that I have chosen to term production-based quality. Instead, the responses were about the conditions that might produce quality. The responses categorised as 'structural quality' correlate with ideas on quality such as those found in the ITERS-R environment audit tool (Harms et al., 2006). Since the development of nursery environments suitable for two-year-olds had been a very recent endeavour in three of the schools, focus on environments and resources might be considered unsurprising. It was also a large component of the training that had been delivered by the LA (see section 3.2.1), and although not the only component, was largely what was remembered.

The notion that staff are an essential aspect of ensuring quality as seen in the largest response in the 'process quality' chart, is in line with ideas about quality in Nutbrown's (2012) review of the workforce and qualifications. One of the things adults might be expected to do is to interact with children and develop their communication skills. Indeed, aspects of language and communication are incorporated into two of the dimensions of quality pedagogy identified as important in provision for children under three years-of-age by Mathers et al.'s (2014a). The first highlights the nature of the adult-child relationship where interactions need to be sensitive and responsive. The second highlights the importance of support for language

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development (see section 4.1.1). Although language development was mentioned throughout the interviews, in answer to the direct question it was only mentioned by two interviewees. Mention of the quality of relationships between children and adults was notably absent. The information included in the pie-charts suggests understandings based largely on tangible aspects of provision and practice and appear to be linked to the imperatives of the school readiness agenda. Therefore, considered as a whole, I argue that these responses to the question about high quality demonstrate multi-layered, sedimented understandings of product-based quality, but that they are influenced by the requirements of the external systems to which the schools are connected (DfE and Ofsted) where a production-based understanding is prevalent. This suggests multiple layers of what is valued; what is valued within the school's provision for two-year-olds interconnected with what is valued by those to whom the school is accountable.

In their questionnaire, Georgeson et al. (2014, p.110) asked respondents about the top three aspects of quality that they considered important for two-year-olds. They presented a choice of nine aspects of structural and process quality and a tenth option of "other". None of the options given by the research team referred to children's outcomes, which correlates with the overarching outcomes of my research. However, the detail of what was considered most important in terms of the magnitude of responses was different in the two studies. For example, in Georgeson et al.'s study support for PSED was the most important factor, followed by partnership with parents and then support for communication and language (2014, p. 39). This is more in line with Mathers et al's (2014a) findings. In contrast, in my study the environment and resources were cited as the most important factor, followed by staff skills and attributes, followed by play-based, child-led opportunities.

The differences in the findings could be accounted for by the different methods used, the different sample sizes or the nature of the samples; the first being on the whole a well qualified and experienced group based mainly in the non-school sector and the sample in my study being made up entirely of school practitoners who were largely unqualified and inexperienced in

working with two-year-olds. The difference might also be accounted for by the focus on 'education' that was highly prevalent in my case schools. In Georgeson et al.'s study the notion of the purpose of the two-year-old FEL initiative was that of early intervention and preparing children for later learning and it appears to have been understood generally across their sample. However, it was much more clearly articulated by a school nursery, in that their response was backed up with reference to research evidence which could suggest a higher importance being placed on school readiness which is a production-based understanding of quality. This also suggests that as I argued in section 5.2.1, the importance of school readiness could be more widely felt by schools than by other providers.

In my study, seventeen interviews were conducted of which there were only two headteachers and only two interviewees at Maple Academy. Morin (2008) advocates that researchers employ a method of analysis and synthesis, both separating and joining data to better understand a situation. Therefore, after analysing the interviews for themes using the Nvivo programme, I subsequently took the references for each theme and manually ascribed them to grids showing multiple demographic elements of the sample such as school, job role, qualification and experience working with two-year-olds. With such a small sample it is perhaps unsurprising that in the majority of themes analysis of the responses according to the various demographics exposed no significant correlation in responses. Had the sample been larger the outcome could possibly have been different. Nevertheless it is worth remembering Cilliers' (2005) warning that from an understanding of open systems findings cannot be used to predict future system behaviour or be replicated faithfully in another system – therefore any findings can only ever be considered as 'modest' ones.

With reference to the data on structural and process quality, the additional analysis highlighted some similarities and differences between individuals or schools and raised further questions. For example, the grids included in Appendix 6 demonstrate that in terms of structural quality the majority of the interviewees made reference to the quality of the environment and resources offered. A striking exception was that in answer to this specific question

about 'high quality', three out of the four senior practitioners made no references at all to structural aspects of the provision. Instead, in terms of what I categorised as process quality, they made reference to either staff skills and attributes or the provision of play-based, child-led opportunities which was another of the important aspects of quality identified by Mathers et al. (2014a). This could indicate that the senior practitioners perceived the adult role and pedagogy to be more important than the environment and resources. The distribution of comments also indicated that in terms of process quality, each of the teams at Willow Academy and Oak Primary had a broad and fairly consistent understanding of what they thought high quality entailed which could be understood as examples of the recursive and holographic principles (Morin, 2008). I return to the theme of shared understandings in section 7.1.2.

7.1.1 The quality debate versus the quality movement

Appendix 5 shows the open codes I developed in relation to Garvin's (1984) category of a user-based understanding of quality that took into account the various perceived needs of children, parents, the wider community and the school. I took the data relating to each open code and then used the same method for analysis/synthesis as described above in section 7.1 however this time I used highlighters to develop additional codes nested within each one. An example of the resulting grids can be seen in Appendix 7 where I make a further analysis of the open code 'Needs of children – compensating for the home learning environment'.

What I noticed was that rather than exemplifying Katz' (1993) notion of multiple perspectives on what constitutes quality for the different stakeholder groups, analysis of the interviews demonstrated a strong tendency to a deficit view of children and parents. The comments essentially catalogue what interviewees perceived to be barriers to the school achieving its aims of improved outcomes for children as measured in Ofsted inspection. For example poor language skills and a lack of attention to language development by parents were included in some of the comments:

They don't even, they can't even speak some of them, and I'm not talking about EAL children I'm on about White British children.
(Ryley, practitioner at Sycamore Primary)

I suppose the increase in American accents of the young children as well was a slight concern of mine, erm, which was sort of leading me to feel that those who weren't going to private nurseries were just sitting in front of televisions on a daily basis.
(Oliver, headteacher at Oak Primary)

…for them to actually understand. And like they can't name the skill that they're doing either so we have to say, 'Oh, we're building'. And it's all about commenting on their play to try and give them the language, cos they don't seem to come in with the language.
(Claire, senior practitioner at Willow Academy)

Accountability measures require schools to demonstrate progress from starting points. One impact of this necessity is that children are assessed and grouped into normative categories of 'at', 'above' or 'below' age-related-expectations. Bradbury and Robert-Holmes (2016) claim that in support of their school's "Ofsted Story" some teachers are pressured into assessing children as having low starting points in order to show good progress. I argue that even where starting points are assessed acurately, the accountability system means that a story must be developed and rehearsed to explain children's levels of development in general terms as they start school. This is what I believe the three quotes above are demonstrating.

Analysing these deficit messages from a complexity viewpoint, I believe that Morin's (2008) explanation of feedback loops that react and retroact within a system can support an understanding of how the messages develop and grow –the recursive principle. The impact of this recursive activity is that at school level frequent repetition of Ofsted stories, such as those heard in my case schools, changes the strength of these 'stories' so that they become 'undisputed truths'. Similarities are evident between the process of messages gathering strength within school systems and the phenomenon I referred to in section 4.1.2 where the frequently repeated messages of politicians and policy makers also resulted in the impression of truth being told (Edwards et al., 2015; Dechêne et al., 2010).

The second set of messages that flow through the system and interact with messages about accountability are those about parenting that I discuss throughout section 5.3, arguing that strong linear connections have been made between poverty (children accessing two-year-old FEL places), poor parenting and poor educational outcomes. Together, through strong feedback loops, the accountability agenda and messages about parenting produce a situation that has not only impacted on how teachers view quality but also on how they view children and families. Further, as Dahlberg et al. (1999) claimed, the discourse of quality then changes the way education is conceptualised and enacted. Therefore I consider the deficit messages to be examples of both the recursive and the holographic principles (see section 2.5.2) and the way the messages travel through the system as an example of the inseparability of the separable. The concept of "the ecology of action" (Morin, 2006, p. 21) can also be used to theorise how the desire to create explanations about low starting points might also have the unintended consequence of creating an inerasable view of parents and children (Brooker, 2015) that subsequently hinders partnerships between school and families and thereby hinders children's future progress.

As I reflected on my data, I realised that, with the exception of some of the comments included in the code 'Needs of parents (setting attributes)' that were mostly derived from answers to direct questions about what practitioners thought parents perceived to be quality, the content of most of the other user-based codes were *my* interpretation of interviewees comments about what children and parents 'needed'. Although I categorised these comments against 'user-based understandings of quality' and what different stakeholders 'need', I do not think the interviewees ever intended their comments to be construed as their interpretations of what parents or children might say they 'needed' if they had been asked. Instead I now view the deficit comments about children and parents as being used to legitimise the case for early intervention which might be better understood as indicating a value-based understanding of quality.

When I asked participants what they thought parents might perceive to be quality for their two-year-olds it was evident that this was not something they

had formally considered before. As I mentioned in my methodology chapter, I frequently reframed the question to ask whether parents had commented on things they liked about the provision or things that they were concerned about as a way of thinking about parents' ideas about quality. I concluded that the discussions about quality for two-year-olds that took place in my case schools did not demonstrate a sensibility of taking into account the views of different stakeholders as advocated by writers such as Katz (1993) and Moss (2014) in the 'quality debate'.

Analysing the data through the lens of Garvin's (1984) categories enabled me to see the lack of multi-perspectival interpretations of quality whilst also recognising that there were nevertheless multiple interpretations of quality and interaction between categories. Developing the grids as exemplified in Appendix 7 enabled me to follow Morin's (2006) encouragement to separate and connect by exploring the similarities and differences within and between schools. For example, where I was able to carry out an interview with headteachers, there was a marked difference in responses between both schools and also within one of the schools. The next section explores these differences in more depth. To do so I draw on the work of Seawright and Young (1996) who argued for a continuum of understandings of quality which in their case was based on Garvn's (1984) five categories of quality.

7.1.2 Recursivity – we are both product and producer of our environments

Being able to articulate your school's story is an important aspect of the Ofsted inspection process (Bradbury & Robert-Holmes, 2016). Oliver the headteacher at Oak Primary had a very strong sense of the make-up of his school catchment area even though it was a very general view. He had a clear idea of how things should be done at Oak Primary which was one of the benefits he saw in employing Kay, an existing member of staff, as team leader in the new two-year-old provision. Oliver's attention to the Oak Primary method of doing things can be understood as an example of complexity reduction and ensuring stability in a complex adaptive system, even when new ideas are being introduced.

Although he delegated the management of the two-year-old team to his EYFS leader, he spent regular time in the room to understand how the sessions were organised:

> it was fascinating to see the children active and engaged and being supported when needed, very much solving their own problems… and working together as well in some respects. Developing in their ability to articulate what it is they're doing, and you know, and having an environment that, that gives them the freedom to do that really. I feel that the adults we've got working in there have got a genuine understanding of the children and where they're at and they've got quite strong relationships already.
> (Oliver, headteacher at Oak Primary)

Spending time in the two-year-old provision meant that Oliver could confidently talk to external people about the way the team worked with the two-year-olds and why that was important. In turn, the team had a cohesive response about what was important for two-year-olds. This type of strategy means that there is less likely to be a "mismatch of [the] quality expectations" (see section 4.1.1) as described by Seawright and Young (1996, p. 107) as there is two-way dialogue between the part of the organisation primarily interested in process (the two-year-old classroom) and the part of the organisation responsible for outcomes with an outward-facing role (the leadership team). What was important to the school came through in terms of adults having the ability to develop children's learning. It was also clear that the two members of staff with previous experience of working with two-year-olds had a strong influence on practice. For example, in their approach to staff-child interactions, to play-based, child-led learning, the structure of sessions and in keeping any group sessions very short and active. That the practitioners were learning from each other and that they each had different skills and attributes to contribute to the team was acknowledged by all practitioners during interview.

In contrast, Tabitha at Sycamore Primary had taken over a school in difficulties and in her first ten months had concentrated most of her efforts on results further up the school. In the interview she said that she had no experience of nursery in any of her previous schools, had rarely visited the EYFS Unit in this school and had very little idea of what she should expect.

Her ideas about quality were based on her own experience as a parent of a now grown-up child and a joint visit to the EYFS Unit with an HMI inspector who commented that expectations were not high enough. Tabitha's stated ideas about quality were therefore based on high expectations, school readiness in terms of literacy and maths, and a clean, safe environment that is welcoming to parents. It is interesting to note that Tabitha was being held to account in terms of children's academic outcomes and in financial terms in ensuring that the number of children attending the nursery rose to cover costs: and was possibly a case of 'what gets measured gets done' that was discussed in section 5.2.1.

Tabitha's rather sketchy ideas about quality were not shared by the team working with two-year-olds and the interviews demonstrated that there was no obvious correlation of understanding within the team. Like Tabitha, none of the team had a strong vision of quality for the two-year-olds in their setting and each person's views reflected their individual concerns. Florence thought that two-year-olds needed domestic learning experiences such as cooking and shopping – but not in school. Meanwhile, Ryley thought quality meant having more, experienced staff and an environment that was safe. For each of these practitioners their ideas about quality were shaped by the difficulties they encountered when two-year-old FEL children were offered places in school. Unlike the other schools they had not designed a new space and therefore had not been forced to think about a relevant environment. The small numbers of children accessing two-year-old FEL places had joined the existing nursery routines and again, the practitioners had not been forced to think about what might be appropriate or inappropriate for those younger children. When HMI visited the presence of two-year-old FEL children was not pointed out by the school and so provision for them was not considered in the inspection. Further, the practitioners all had different recollections of how many cohorts of two-year-old FEL children they had received. It could be argued that these children were falling below the radar.

As I have already outlined in Chapter Six, it was clear that the team at Sycamore Primary had had very little time to think specifically about this

cohort of children. The practitioners reported that the needs of the children who were just three-years-old were very different to the children accessing three and four-year-old places and so it seems to be important that these younger children are planned for separately, even when they access the same space as the older children. For the other schools, the experience of developing spaces and routines suitable for much younger children seems to have forced the schools to rethink and review their practice.

Seawright and Young's claim about a "mismatch of [the] quality expectations" (1996, p. 107) occurring where understandings of quality are not shared or understood within and between the different functions of an organisation is also relevant to the case of Sycamore Primary. There were multiple and sometimes conflicting understandings of quality for two-year-olds and no sense of a strong overarching understanding. Seawright and Young claim that:

> effective implementation and management of quality management programmes require consensus or cross-functional goals that must be based on a shared understanding of quality definitions (1996, p. 107).

My interpretation of Seawright and Young's argument is that it is not necessary for everyone within an organisation to have exactly the same understanding of quality but that each function within an organisation should be clear about the way that quality is being interpreted in other parts of the system so that conversations between functions can be effective. There is also a risk that without fully understanding the requirements of the connecting function(s) the success of organisational goals may be put in jeopardy.

By attempting a "disinterested understanding" (Morin, 1999, p. 52) of the DfE strategy of designating Ofsted as the "sole arbiter of quality" (DfE, 2013b, p. 11) and using the rationale underpinning Seawright and Young's quote above, I can see the logic of DfE wanting to define cross-functonal goals throughout the entire ECE system. As a commissioner of services it then makes sense that the DfE should leave the issue of a shared understanding of quality definitions throughout the supplier organisations to those schools and settings. This does not mean that I have to agree with the hierarchy of

measurable outcomes over other understandings of quality but it does open up possibilities for other ways of thinking about how understandings are (or could be) shared within school organisations. I return to this argument at the end of this chapter.

7.2 Input quality

An additional question asked of those in leadership roles was how would leaders know if their two-year-old FEL intervention was successful and what kind of measures might they use. Oliver provided this response:

> in the way we measure the successes in the rest of the school. We look at how they've come in. We look at the support that we've offered and we look at where they are when they leave us. So we'll keep it as simple as that really. (Oliver, headteacher at Oak Primary)

Oliver could have looked for other outcomes, including measurable outcomes such as regular attendance or children's levels of well-being and involvement (Laevers, Vandenbussche, Kog & Depondt, n.d). However, his response might be interpreted as a very clear example of a production-based understanding of the education process and one which these interviews and my experience tells me is typical within my LA and most probably beyond.

Robert-Holmes and Bradbury (2016) claim that the necessity of measurement is distorting the way children are being seen by schools. Whenever interviewees told their school's story about 'how they've come in', they each had a tendency to talk about 'this area' rather than directly talking about poverty or disadvantage. For all schools there was a tendency to treat the families in their catchments as homogenous groups and to understand families according to common characteristics which could be described as a case of complexity reduction.

At Willow Academy it was notable that all five interviewees talked about the characteristics of 'the area' in a cohesive way that appeared to be system level behaviour. However, at classroom level, practitioners also understood their families in individual terms. These practitioners had carried out home visits prior to children starting and therefore had some sense of the material wealth and circumstances of different households and some idea of the kinds

of home experiences available to the two-year-old FEL children. For example, "maybe they're from the families that probably haven't got as much at home" (Claire, senior practitioner at Willow Academy) or "children that the parents may be suffering from depression" (Joanne, practitioner at Willow Academy). I interpret these findings as reflecting an outward facing story about their catchment area and an inward facing story about the individual children and families; intuitively combining and separating to understand.

7.2.1 Building a rationale for early intervention

In my original analysis of the data using Garvin's (1984) categories as a framework (see Appendix 5) I had only coded against value-based understandings 'Any references to making the most with the resources you have'. However, in Chapter Four – Quality, I ascribed the arguments for early intervention to this value-based category (see section 4.2.1). Therefore, I undertook a further analysis of the data but instead of restricting the analysis to a value-based understanding, I created open codes for the subject of early intervention (see Appendix 8) in order to take account of the multi-layered, sedimented understandings linked to this subject.

Rather than long-term goals, for example of social mobility, what appeared to matter more to schools was improving children's results in the 'here-and-now' and achieving what Helen at Willow Academy described as a "win-win" situation for the child and the school. There were a few future-oriented comments about two-year-old FEL places benefiting children by giving them a "good start in life really and good role models and things" (Claire, senior practitioner at Willow Academy). However, the generic comments about parents were most frequently of a deficit nature and some practitioners expressed a general impression that the parents in their school catchment had low expectations.

Although not expressed as poor parenting, having low expectations was certainly seen as an unhelpful aspect of their parenting style. Mirroring the messages given in the life-cycle approach to social mobility (HMG, 2011b), poor outcomes were seen as a consequence of low expectations that in turn were seen as a condition associated with poverty:

> Our children are coming to us with parents with low expectations of their children, with financial pressures and pressures on the families and so the children are coming to us with lower abilities",
> (Kay, senior practitioner at Oak Primary)

This comment contrasts with Kay's comments about parents at the end of section 6.1 that were more aligned to the messages about the purpose of the two-year-old initiative from the New Labour perspective and is an example of sedimented understandings of quality for these children and families. Simpson et al. (2015, pp. 101-103) claim that the neoliberal discourse on good and bad parenting acts as a force of symbolic power. In their study they found that most ECE practitioners shared "the neoliberal construction and attribution of cause, blame and responsibility for child poverty". They claim that the combination of the discourse on parenting and the impact of EYFS measures influenced how practioners thought about and worked with childen and families and reduced practitioner sensitivity to issues surrounding poverty. Kay's comment linking parents, poverty and children's outcomes supports this argument about symbolic power influencing the way that practitioners think and act in pursuit of school-based goals and how it influences their perception of the role of parents. The discussion below suggests that some of the interpretations may be held by practitioners at a more unconscious level.

Much of the literature on parental involvement comes from a school-centred position, however there are some studies that raise such school-centredness as an issue and question the efficacy of building relationships with parents on the kind of deficit assumptions I came across in the interviews. For example, it is argued that teacher attitudes about the parental role in children's education frequently come from a middle-class perspective (Pushor & Amendt, 2018; Crozier, 2001). Hornby and Lafaele (2011) claim that additional influences impacting on deficit attitudes are school responses to accountability agendas and negative messages about parental responsibility in the media. They also argue (p. 45) that deficit views stem from the fact that both teachers and parents have attitudes to education "that are deeply rooted within their own historical, economic, educational, ethnic, class and gendered experiences".

As these deep rooted attitudes mostly operate at an unconscious level, Pushor and Amendt (2018) argue that any assumptions about parents and families could go unchallenged. The idea of unchallenged assumptions appears to be an important one because it can lead to situations where practitioners reject ideas that do not fit with what Morin (2008, p. 8) termed the "culturally inscribed paradigm". It is possible to see how a dichotomous understanding could then evolve into a situation where practitioners take a position of 'parents don't care' or 'parents don't do the right thing by their children' and instead of parents feeling more included in their children's learning at school they could feel more excluded.

Low expectations were not the only examples shared during the interviews of 'poor parenting' in terms of not behaving in ways, or valuing the things that would support their children to do better in school (and for schools to improve their results). When I analysed the interviews I came to the conclusion that whatever the schools perceived as barriers to achieving good results at the end of the EYFS were the things they talked about in deficit terms when discussing the children and families in their area. I understand this phenomenon as another example of Morin's (2008) explanation of rationality having the potential to transform into rationalization.

At Sycamore Primary there were concerns that the time taken to change children who were not yet toilet trained was impacting on the staff capacity to support the academic skills of the older children. Their discussion of children coming into the setting focused on staff having to act in loco-parentis, teaching aspects of self-care such as toileting and eating independently that staff believed should be taught in the home. At Oak Primary where they wanted to start some of the children earlier in order to improve academic outcomes, the barrier they saw was parents not wanting their children to start early:

> "They're too young to come to school Mr Smith" and that "It doesn't seem right that"…..for another family, it's almost to do with they're their last in the line. And so I think for mum, that's a bit of a step to let go of your little one younger than maybe you let go of the other one to go into school. I think it's more her issues, you know? That actually

she likes being mum and she likes the little one being at home with her.
(Oliver, headteacher at Oak Primary)

For all of the schools low levels of language and communication was the common theme and for some children in some schools it was well below what would be typically expected for their age:

> these children that are making sounds 'g, g, g, g, g'. So when we're talking about the children, all we're thinking about in our heads is like 'language, language, language'…we're not at a level where we're questioning. We're at a level where we're commenting on children's play. We're pausing, stepping back, watching what's going on and then giving them opportunity to talk…it's starting on that very, very early level because, for some of the children we haven't got anything.
> (Ellen, senior practitioner at Maple Academy)

The rapid development of language from the age of two in 'typically developing' children (Early Education, 2012) means that to focus on language with this cohort of children would seem appropriate if they are to catch-up or keep-up with their peers. For several practitioners there was a sense of comparing the two-year-old FEL children with the children of professional parents in previous work placements, with their own children, and even with the family dog. Again, this underpins the idea that practitioner's views about parenting come from a classed position:

> when we first got a dog, the first place we took him was the Sculpture Park and all the way round I was saying 'Look, there's some sheep'. I had to laugh because I thought to myself I've spoken to the dog more than I know that some of our children get spoken to. … and that makes me feel really, really sad. So I think in terms of that the children, those children are getting, you know a better, enriched life really for having that FEL, whereas another 2 year old will have that through their parents much, much more.
> (Helen, EYFS leader at Willow Academy)

The discussions in each school demonstrated multi-layered understandings of quality. In several of the interviews, such as Helen's argument above, I interpreted the discussions as demonstrating a philosophical/moral understanding of the purpose of this early intervention. However, given the earlier discussion about deficit assumptions and the potential for dichotomous thinking about the role of parents where schools tend to favour white, middle class perceptions, this should not necessarily be taken to be

less problematic than the production-based understandings that were also shared. Indeed, it is likely that where these philosophical/ moral arguments occur they will be entangled with other understandings of quality. For example, I strongly suspect that at school level, in terms of 'what gets measured matters', the strong focus on language development is probably triggered by the expectations that by the end of EYFS children are expected to achieve the Early Learning Goals in Reading and Writing to be considered 'ready' for the next stage in their education. How the subject of school readiness was manifested throughout the interviews is explored in the next section.

7.3 School readiness

The prime areas of learning (DfE, 2017b) are understood as the foundations upon which later learning such as literacy and mathematics are based and therefore, to keep up with their peers, children are expected to be at or near 'typical' expectations in PSED, Physical development, and Communication and language as they start school in Reception. In this section I explore how the concept of school readiness was discussed in the four schools with reference to the two-year-olds accessing FEL places. I use the terms 'repair' and 'prepare' as critical terms to highlight the problematic assumptions that underpin the school readiness discourse. I offer the two terms in a deliberately provocative way to signal my understanding of the early intervention strategies being used to ready children for the next stage of their education as being aligned to the business management logic of operations management and SPC. 'Repair' refers to the part of the process where interventions are introduced for children who are perceived to be behind in terms of 'typical development' for their age, and 'prepare' refers to strategies used to make sure children are ready to cope with the expectations of three-year-old nursery provision.

7.3.1 'Repair'

With the exception of Sycamore Primary where the younger children were not being planned for separately from the children accessing the three and four-year-old nursery places, in each of the other three schools the main

focus of 'repair' activities was targeted on communication and language development. The way this was carried out differed between settings.

According to Kay at Oak Primary, Lorraine, a graduate with Early Years Practitioner Status, was very skilled in her interactions with children, developing their language during free-play by taking her cues from them and starting at the level the children were at. Lorraine's colleagues described themselves as learning from her example and further improving their own staff-child interactions. At Oak Primary there could be a maximum of three adults to twelve children but in Summer 2014 it was more often a case of three adults to eight or nine children. Therefore the likelihood of children having individual interactions with adults throughout the session that would support the development of language skills was high.

At Willow Academy there was a ratio of five staff to twenty children. Claire also recognised that adults needed to support children's vocabulary development in context throughout the session:

> So if you asked a child what was they doing? They'd just say 'Playing' or 'Urr'. So we have to say, 'Oh, we're building' or 'We're rolling playdough' and actually tell them what they are doing, so they know what the skill is cos they just see it as playing.
> (Claire, senior practitioner at Willow Academy)

It was notable that this strategy was not commented on by the rest of her team and instead their discussions centred on the discreet, five minute group language activities based on the development of a bank of vocabulary that they considered children should 'typically' have acquired by the age of three. The terms and conditions of employment at Willow Academy mean that planning is only done by teachers and 'Level Four' teaching assistants. Michelle describes the language activities that were planned by the room leader Claire and organised according to children's levels of ability:

> last week, we asked the children to line vehicles up… and then we asked them to name each vehicle. Then we put them in a bag and then got the children to bring them out and they had to name them individually… So after we've done that then we have to report back to the Level 4…So we can monitor who's doing OK, who might be struggling, who's doing really well, so then they can adapt stages and then the lower group we can do more with them.

Although in my professional capacity I might question whether the content of these activities is appropriate for the whole cohort of children, my experience tells me that a group of four two-year-olds working with one adult would let their feelings be known if they found the activity uninteresting. According to the interviewees, they were managing to keep children's attention for the five minutes the group was operating and it is likely that as well as the intended vocabulary development, children would also be gaining experience of the social skills required to take part in small groups with their peers and developing relationships with others. Whereas Oak Primary and Maple Academy interviewees described a more individualised approach to responding to children's language development which is in line with the aspects of quality highlighted by Mathers et al. (2014a), at Willow Academy the approach could be described as much more production-based. Children received a more standardised language input and were regularly measured pre and post intervention to check for progress towards the target of being 'ready' for the next stage of their education. One impact of this system appears to be that children were perceived as belonging to groups according to normative categories and interventions were adjusted according to group identity as indicated by Michelle's comment about "the lower group we can do more with them".

Here Joanne describes the differences in planning for children at Willow Academy compared to the previous nursery on the site:

> We did all the planning together at (previous nursery on site). It's a lot different planning from here… Like here we plan for the whole room and then evaluate the children but for (previous nursery on site) we used to plan for every child.
> (Joanne, practitioner at Willow Academy)

Joanne liked the previous individual planning because she could see where there were gaps in the children's records that were based on a grid of child development statements, "Oh that child needs to do PSED 10". Nevertheless she recognised that some children may have missed out in the old system compared to now "they're all getting that input every day".

Joanne felt that children's progress in terms of language and social skills had "come on a lot, just by having these little groups".

The old approach to planning was not unproblematic. It may have considered individual children but, according to Joanne, was driven by gaps in records of development and the experience of individual children was very much dependent on the individual adults working with them. From a complexity viewpoint, I believe that the newly introduced systematic language intervention strategy at Willow Academy could be interpreted as an example of complexity reduction. Using such a strategy with a new team is a means of ensuring that all staff understand the school's expectations around language development whilst also ensuring that all children are screened and given some regular language input. Although different to the more individual, responsive way language was being developed at Oak Primary, at Willow Academy there was still a strong focus on language and communication development – something that did not appear to be the case in the former organisation according to Joanne.

7.3.2 'Prepare'

Whereas the 'repair' activities were mainly focused on Communication and Language, the 'prepare' aspects of the two-year-old FEL provision were more focused on the skills and dispositions that would help children to be ready for the expectations of later schooling which belongs to the argument about parenting and cultural capital I raised in section 5.3.1. In terms of physical development all of the schools talked about working with some families with regards to toileting. I interpret this as also being part of the care and education argument – when children enter the three and four-year-old provision on a 1-13 ratio schools need children to be more independent in managing their own care needs so that teachers can concentrate on the more academic aspects of education.

Another aspect of physical development that was mentioned by several practitioners was the need to have resources and activities to support children's gross and fine motor development. This outcome is very different to the findings in Georgeson et al.'s (2014) study where references to

physical development by participants were notably absent. I consider this difference to be an outcome of the school readiness agenda that has a high profile in schools.

Throughout the interviews there was also a strong focus on preparation via PSED skills such as sharing and turn-taking, getting on as part of a group and following the setting's rules and expectations. Deficit comments implying poor parenting practices such as the one below were fairly typical:

> Children come with no skills, no social skills, emotional skills or anything. It's like they, you start them from now.
> (Kate, practitioner at Sycamore Primary)

Kate's comments could be considered as an explicit example of school-based values overriding any understanding of what might be valued in the child's culture. There were other comments linked to the way children had been parented that suggested starting 'school' at three years-of-age would be difficult:

> they might not be getting spoken to, they might not be getting you know rules and boundaries set down for them and just a few hours a day, it just helps I think, just get them on the right track. We've got one little boy that's really growly and he's from one of those families that promote him being a rough and tumble boy….. we've been able to just bring out his softer side a little bit …if he'd have started in nursery he would have been one of those boys that got labelled as, well a 'naughty boy', you know, because that's what he's been made to be.
> (Lorraine, practitioner at Oak Primary)

Although Lorraine's comments about this boy could be interpreted as well intentioned in terms of wanting him to have a good start in three-year-old nursery, they also exemplify the kind of assumptions that appear to be prevalent about parenting in "those families", particularly in terms of parental responsibility for language development and behaviour. Developing his "softer side" indicates the assumption that the parenting he has received so far has not prepared him for the behavioural expectations of school. I interpret Lorraine's comment as meaning that by accessing the two-year-old FEL place with a 1:4 adult-child ratio the school has been able to compensate for the perceived gap in his development which would have

been difficult if he had started in the three-year-old provision with a 1:13 ratio.

The following example seems to suggest that it is not just the behaviour of children, but parents also require interventions to 'prepare' for school:

> attendance is a problem. So, if we can get them in early, it gets them into the routine before they go to school.
> (Claire, senior practitioner at Willow Academy)

A benefit mentioned by all schools in different ways was the opportunity for children to develop acceptable learning behaviours in school that included joining in at group times, training children how to play with materials, looking after the environment and putting resources away after use. The experience of new and different activities and playing with materials that may not have been available in the home learning environment are all part of a cultural capital argument. Namely, that having these opportunities before universal nursery provision at three is giving the children eligible for two-year-old FEL places similar opportunities to those experienced in the home environment or daycare settings by their more affluent peers. A counter argument raised by Brooker (2015) is that aquiring cultural capital is a complex and lengthy process that starts at birth. She therefore questions the likelihood of a one year intervention with two-year-olds being able to fully compensate for these differences.

The most frequently mentioned advantage of starting children early in preparation for universal provision at three is that the children are already settled in the school environment. This was also one of the advantages of school-based two-year-old FEL provision that was cited later by Wilshaw (2016) (see section 5.1.2). The way that transition occurred in each of the settings was very different and I suspect would impact differently on the children and families experiencing it. At Oak Primary they described a protracted settling-in period where parents stayed with their children in the classroom until such times that both child and parent were comfortable to separate. Nevertheless, the following extract shows a multi-layered understanding of quality and that Kay was still mindful of the expectations on practitioners to share their parenting 'expertise' and support the HLE:

I want it to be a place where you know, the families can come and feel comfortable that they can come, stay if they want. Stay all morning, stay all afternoon. Be involved in the child's learning. Be involved in you know, what we do… we're modelling how we talk to children and hopefully you know, the parents will pick up on you know, the good language we're using and how we sort of organise the children so that you know, we're not just there for the children, we're there for the families as well.

(Kay, senior practitioner at Oak Primary)

At Sycamore Academy there was a sense that the practitioner role was to develop a trusting relationship with the parents but that the parents were expected to leave their child after a few transition visits, even if the child was upset:

> my role is to make them feel at ease, knowing that they can leave their child in care and safety. That I will treat them like I expected my children to be tret when they were at Nursery. You treat them as your own…One of the parents…brought her twice because we have a couple of visits and mum wouldn't leave her. She said, "No, she's not starting now til after September". But I think if mum would have left her, like now we've got to do all that resettling when she starts again in September… Instead of just leaving her, because we've said before "Just leave em, let em cry. If they get that desperate we will phone you. Just leave her". And she wouldn't.
> (Ryley, practitioner at Sycamore Academy)

At Willow Academy there was a similar sense of transition into nursery being a stage that children had to get through in a way that implied it was the child's responsibility to settle in order to access education and that I interpret to be another aspect of the care and education divide that I explore in section 5.2 . It was recognised that making the transition at two-years-old would be difficult for the child and that the 'shock' was an inevitable part of their educational journey:

> Because it's a bit of a shock when they first start and they've got to sit down for story time, they've got to do this, you've got to do that. It's quite a shock for them.

> I think it's actually attending…I don't think parents do much with them at home. I don't think they get a lot of support at home. So I think when they are coming in at three year old, I think they're not prepared for it…they find it difficult to adapt to the situation again, being away from your parents and things. That definitely helps with the two year olds. Cos even though it's a bit of a shock for them being away from their parents at a younger age, when they do move up to the three

> year old side, they won't have that because they've already been
> away from their parents.
> (Michelle, practitioner at Willow Academy)

It is argued that because middle-class parenting is more in line with the values held by schools, parent-school relationships with this group are more readily developed (Hornby & Lafaele, 2011). It suggests that children who have experienced a middle-class parenting style will find the transition from home to school easier than children from other class or ethnic groups because of their familiarity with the types of experiences and adult approaches in the school environment and because their parents are obviously comfortable in that environment (Brooker, 2002). It further suggests that as a result of the care-education divide apparent in the way some schools are managing their transition processes, where children are implicitly expected to take the shocks and upset in pursuit of future benefit to their education, these two-year-olds could be experiencing a double disadvantage in comparison to their middle-class peers.

7.4 The importance of understanding the way quality is interpreted throughout the system

Seawright and Young (1996) developed a quality continuum based on Garvin's (1984) five definitions of quality (see Figure 9). They did so to illustrate how in a traditional manufacturing or service industry, whilst separate internal and outward-facing functions of a business may require different interpretations of quality, success depends on each separate function understanding the way quality is interpreted in connecting functions and understanding how they each contribute to organisational goals. Whilst

Manufacturing-Based	Product-Based	User-Based	Value-Based	Strategic-Based
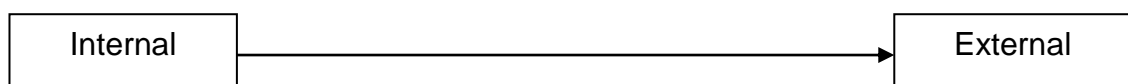
Internal	→	External

Figure 9: The definitions of quality are organized along a continuum from internal to external. Each definition has a direct impact on the definition to its right (from Seawright and Young, 1996, p. 112).

this model might be appropriate for a straightforward manufacturing or

service industry, I contend that where products or services are

commissioned, as in the education system, the connection chain should be

reversed as it is the external body that specifies the required quality

outcomes. Figure 10 is my interpretation of the connections in the current

English education system.

Values and purpose Production based	Product based	Values and purpose Philosophical/moral based
What? ←→	**How?** ←→	**Why?**
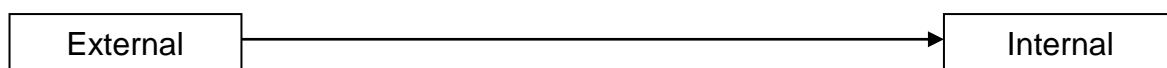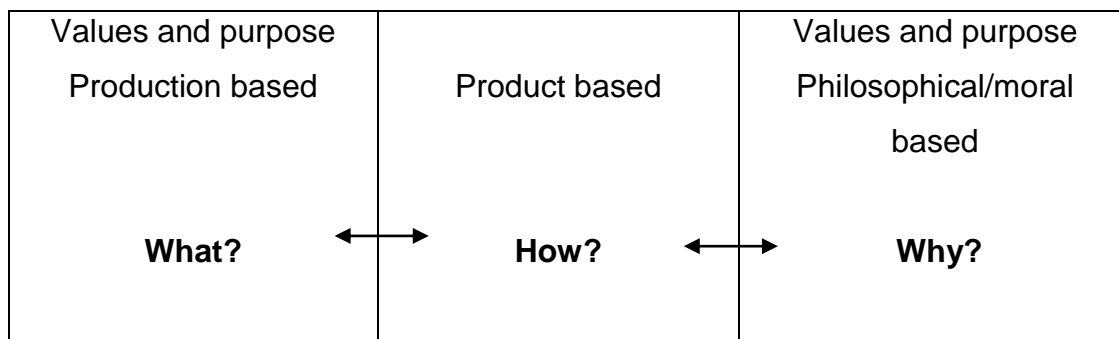
External	——————————————→	Internal

Figure 10: Where goods or services are commissioned such as in education, the definitions of quality are organised along a continuum from external to internal. There is potential for two-way influence at each connection point.

My view from complexity means that I see the education system as a

complex and richly networked entity. However, by choosing to depict the

education system in a simplified way as a continuum, it supports me to show

the differences between organisations that are commissioned to provide

goods and services and those that are not (Figure 9). The model also helps

me to consider the connection where most of the current quality

conversations are focused – between the production-based and product-

based functions.

The box on the lefthandside represents the DfE production-based

expectations that are influenced by its understanding of the value and

purpose of education. The middle box represents the space where the structural and process aspects of quality are enacted, for example, in the early years classroom, and the arrow between those two boxes represents the dialogue that occurs between schools and DfE / Ofsted. Due to the high-stakes nature of the Ofsted inspection process in schools (see section 5.2.1), the conversations that occur at this point in the education process are well rehearsed and backed up with much data. Here I am also reminded of Jorg's (2017) claim that impact of power means that the strength of relationship between two parts of the system will not be equal (see section 2.4.2) and therefore what is measured could impact disproportionately on what happens in the classroom.

Figure 10 also helps me to see where there is potential for people in roles such as mine and those working directly with two-year-olds to have more conversations regarding values and the purpose of education, particularly as it relates to two-year-olds accessing FEL places. I perceive the philosophical/moral discussions that occur (or could occur) in schools about the purpose of the two-year-old FEL as belonging in the box on the righthandside. Promoting such discussions would mean that there is a possibility of impacting on the product-based understanding of quality and what occurs in the classroom. It would provide opportunity to counterbalance the dialogue occuring between the product-based and production based functions of the system. I argue that without any counterbalancing dialogue the system will remain biased in favour of the dominant data driven conception of quality outcomes. Using this model to think about the two schools, my interpretation of the system at Oak Primary is that there were established two-way conversations between each part of the continuum in relation to two-year-olds. In contrast, at Sycamore Primary, the product-based and philosophical/moral based discussions were weak and there did not appear to be a two-way flow between parts of the organisation.

Standing back and taking a meta-view of education as a production-based process, it is possible to develop a different interpretation of why children who experience middle-class parenting styles are advantaged in the current

school system (Hornby & Lafaele, 2011; Brooker, 2002). I offer this interpretation as additional to existing ones rather than being an alternative view – in Morin's terms "both/and" rather than "either/or" (2008, p. 33). The righthand box in Figure 10 is the start of the school 'production' process and righthandside of that box is the place where children enter the process from home; the point of transition. If my interpretation of Seawright and Young's claim is correct, that for organisational goals to be successful it is important that each function within the production process understands the requirements of the connecting functions, even where their understanding of quality is different, it suggests that more attention should be paid to connection points and that includes where children enter the education process. This production-based view offers an additional interpretation of why transition is easier and the outcomes better when the values between home and school are shared. It also suggests that where values are different that organisational goals are more likely to be achieved if open, two-way dialogue between home and school is developed rather than a system where dichotomous understandings and a culture of blaming parents exists.

Critical complexity reminds me that systems are dynamic and have the ability to adapt and change in order to survive. The concept of recursivity also reminds me that I can be an agent of change; I can play a part in producing the environment I inhabit as well as being formed by it. In my role I have the opportunity to open discursive spaces where practitioners can discuss and rehearse their philosophical/moral based understandings of quality which may then support them to redress the current imbalance that exists in the education sector. I can also act as an advocate for parents, challenging any culturally inscribed paradigms held by practitioners and encouraging more effective two-way dialogue between parents and schools.

7.5 Chapter conclusion

The concept of recursivity, that we are both the product of and producers of our environments, supports an understanding of the way circumstances at school system level such as financial issues, and external influences, for example, the discourse on parenting and the accountability agenda can

impact on the system and change thinking and practice. Recursivity also supports an understanding of the way practitioners bring their individual experiences to, and potentially influence, a school system. Examples given include Lorraine's prior work with two-year-olds and Helen's parenting style. Morin's (2008) discussion of culturally inscribed paradigms causing ideas and beliefs to be unconsciously held, causing either/or thinking and the potential of rationalization, helps to theorise how deficit assumptions of parents and these two-year-olds have come about.

The business management logic of SPC was highly prevalent in Oliver's explanation of how he would know if the two-year-old FEL intervention was successful and was also noticeable in the Willow academy approach to vocabulary development. Although never explicit, I argue that SPC logic was still evident in all of the schools when interviewees discussed the two-year-old FEL initiative as an early intervention designed to improve children's school readiness in the pursuit of improved school results. As Crossouard (2012) argues, where understandings of quality become taken-for-granted there is a danger that the technologies used to achieve quality also go unchallenged, such that the values and assumptions underpinning those processes are masked. My interpretation of the interviews is that the discussions justifying early intervention strategies, conditioned by the accountability agenda, may have been operating at an unconscious, taken-for-granted level and impacted on how practitioners perceived care and education and how they situated parents and chidren.

In Chapter Two I discussed feedback loops that carry information and ideas throughout a system; some that are known and visible and others that operate in less direct or obvious ways and perhaps function at an unconscious level. The behaviour of these feedback loops is integral to how the system self-organises and either remains stable or transforms. This chapter has explored both individual and collective understandings of quality for two-year-olds in the four case schools. Some of the interpretations were explicit and others, such as views on the role of parents, may have been operating at a more subconscious level. What comes across strongly in the findings is that there are multi-layered, sedimented understandings of quality

present in the four case schools but the overarching sensibility is that of a production-based understanding of quality.

The continnum I developed in Figure 10 provides a framework for thinking about how different interpretations of quality exist throughout different functions of the school system and how these functions could, and indeed should, dialogue with each other. I argued that facilitating discussion about values and vision in order to impact on the product-based understandings of quality is something that I, and people in roles such as mine, could engage in. Doing so could begin to counterbalance the current focus on production-based understandings of quality that are prevalent in the system.

In the next chapter I share my conclusions and suggest ways that these findings could be used to support practice with children and families eligible for two-year-old FEL funding.

Chapter Eight – Conclusions

This thesis posed the question, 'Why would schools choose to have two-year-olds?' I used the contested concept of quality to explore how the purpose of education is being conceptualised in the English education system, how the two-year-olds eligible for FEL places and their families are being situated and how such thinking might be impacting on practice and provision for two-year-olds in the four schools I investigated. The case of this study is one local authority (LA) at a specific time (Summer 2014) when these schools, nested within the LA system, had just started to offer two-year-old FEL places. In order to take account of some of the external and internal influences on the school systems I organised the chapters of the thesis to explore first the concept of quality in the wider education system, then how some of these ideas are manifested in the trajectory of the two-year-old FEL initiative before finally exploring the concept of quality for two-year-olds in the four purposefully selected schools.

8.1 Findings

My main research question was:

> How is 'quality' understood in terms of provision for two-year-olds in English schools and how as a society did we arrive at these understandings?

Sub-questions and main findings are highlighted in the remainder of this section. I used a critical complexity theoretical framework and methodology to answer the questions posed. This involved tracing the trajectories of ideas within the education system such as how business management ideas about quality and quality improvement have impacted on management of the education sector, and how ideas about the impact of poverty on children's outcomes have developed over time. I also conducted semi-structured interviews with seventeen participants from four schools to explore their understandings of quality for two-year-old children and to look for any influence of the business management understandings of quality and the messages from different government administrations.

8.1.1 Influence of business management models

My first sub-question was:

> Have current business models of management and quality improvement had an impact on how quality is perceived by practitioners working in schools offering two-year-old FEL places?

I argue that contemporary busness models of management and quality improvement are strongly influencing the way that the education sector is being managed. School leaders described the imperative for financial stability and the importance of returns for their investment in two-year-old provision which suggests that they think and operate in a businesslike way. Arguments for implementing the two-year-old FEL intervention in the four schools were based on the cost-benefit model of early intervention as promoted in the Allen report (2011b) and which I equate with Garvin's (1984) value-based definition of quality.

In terms of schools' motivations for offering places to two-year-olds, the most common influence that I recognised was a production-based understanding of quality improvement that stemmed from the need to meet Ofsted accountability expectations. Interspersed with these prevalent understandings of quality were other sedimented views on quality that were context specific and subject to the influences of the school organisation and the unique histories of individual members of staff.

This study leads me to believe that production-based understandings, generated from ideas about statistical process control (SPC), have influenced what I now perceive to be a tripartite education process. The process follows an industrial rationale of SPC focusing on the 'quality' of components being fed into the manufacturing process, effective and efficient ways of carrying out the manufacturing process, and the consistency of process outcomes with fewer substandard products. In educational terms I see this as 'school readiness', 'what works' and 'accountability measures'. I perceive the two-year-old FEL initiative as integral to the first part of the SPC process – the school readiness agenda, ensuring that these children can take advantage of their places in three-year-old nursery from day one. Using the manufacturing analogy of a workshop I provocatively describe the two-

year-old FEL process as that of 'repair and prepare', where children judged as not reaching age-related expectations receive interventions in order to catch-up with their peers and become familiar with school expectations.

Direct interview questions about quality for two-year-olds provided examples of 'structural' and 'process' aspects of provision and practice but there were no direct answers about quality that could be categorised as 'outcomes' measures. Therefore I conclude that the interpretations of quality linked to accountability measures are possibly operating at a more unconscious or taken-for-granted level.

8.1.2 Messages about quality from recent governments
What messages have recent Labour, Coalition and Conservative governments and their regulatory body, Ofsted, given about quality in education and with particular reference to two-year-olds eligible for FEL places?

In order to answer this second sub-question I explored understandings of the purpose of education that would inform understandings of quality throughout the three different administrations, starting in 2004 when the Labour Government's first announced a two-year-old FEL initiative. I explored the government messages linked to the dual purpose of FEL places in providing education to improve children's academic outcomes and childcare to enable parents to access training and work. I also explored the messages about education and care that make the distinction between an integrated approach where both are considered necessary at the same time and separate education and care systems, often split in terms of age, where the former concentrate on learning in a narrower academic sense, and the latter concentrate more on relationships and personal care needs.

Two particularly pertinent messages from Ofsted that have relevance to this study were that i) schools are appropriately placed to offer high quality provision for seriously disadvantaged two-year-olds (Wilshaw, 2014), and ii) it is for education providers to decide how best to teach children (Ofsted, 2015b, p. 11). I interpreted the Ofsted statement as a manifestation of the commissioning process used in the wider business sector where commissioners describe the outcomes they require but not the means of

production which is said to allow for innovation and cost reduction in the system. I found the first statement by Wilshaw surprising as in 2014 the school sector had a very short track record of offering places to two-year-olds. I concluded that his statement was possibly linked to the focus on data and academic outcomes that is well established in the school sector due to its different status in the inspection regime in contrast to PV inspections. Although the English EYFS system is nominally an integrated system, I highlighted the possibility that a split system may be re-created due to the combined effects of accountability measures in school inspection regimes and the way teaching and care roles are sometimes split in EYFS classrooms such as was described at Sycamore Prmary.

Entwined with the themes of education/childcare and education/care are the concepts of school readiness, poverty, the role of parents and social mobility. Here I concluded that whilst New Labour policy had always included an element of parental responsibility for supporting children's educational outcomes and promoted the notion that work is the best way to escape poverty, under the Coalition then Conservative governments these messages became much more explicit as expectations. I also found that whilst all administrations made a positive link between poverty and poor outcomes, under the Labour Government causes and consequences of poverty were described as "multiple and complex" (CPU, 2009, p. 11) whereas under later administrations a direct causal link appears to have developed, for example, through the life-cycle approach to social mobility (HMG 2011b, p. 6). Furthermore, the use of free school meals as a proxy indicator for poverty seems to have strengthened the direct causal link between poverty, poor parenting and poor outcomes. The impact of these frequently repeated messages is that they become taken for granted and assumptions may not be challenged, ultimately changing the way that parents and children are positioned.

8.1.3 Practitioners' understandings of quality and the influence of accountability

The last two sub-questions were:

> What do professionals working in English schools consider to be the most important aspects of quality in provision for two-year-olds?

> To what extent do current assessment and accountability practices in ECE influence perceptions of quality in schools?

I found that there were multi-layered, sedimented understandings of quality. Some were discussed explicitly, for example, when interviewees were asked directly about quality for two-year-olds their responses were much more individual and included personal beliefs about quality for two-year-olds. Other understandings of quality might be described as operating at a more unconscious, taken-for-granted level. In particular, the messages about poverty, poor parenting and poor outcomes prevalent in government sources and the media could be discerned in the deficit assumptions made of children and families accessing two-year-old FEL places. Most practitioners and leaders discussed their provision for two-year-olds in terms of production-based and product-based understandings of quality. At system level interviewees talked consistently about 'catching children early' and introducing early intervention strategies so that children were ready for the next stage in their education.

In all schools accountability expectations influenced provision and practice and also contributed to deficit views about children and families. There was a broad consensus in each of the case schools that offering two-year-old FEL places was for the purpose of 'education' in the narrower sense of learning and not 'childcare' for the benefit of parents. In all of the schools there was a strong focus on children's academic outcomes and, with the exception of Oak Primary, the provsion for two year olds was described as a 'scaled-back' or 'stepped-back' version of three-year-old provision. Helen at Willow Academy and Ellen at Maple Academy talked about the classroom environments replicating EYFS provision further up school with 'areas of

learning'. All of the schools included group teaching times within their sessions and in the case of Willow Academy they were heavily monitored, setting children by ability and frequently measuring attainment pre and post group intervention. In terms of 'care', at Sycamore Primary, helping children to become more independent in their personal care needs was seen as a barrier to being able to meet educational expectations. In the other schools it was seen as a necessary preparation for three-year-old nursery.

8.1.4 How as a society did we arrive at these understandings?

I have separated my overarching research question into subquestions and although the findings can be considered separately, in order to develop a fuller explanation and to answer the question of how ideas about quality developed, it is necessary to consider the findings in combination; as interrelated parts of a whole. Here Morin's notion of a meta-viewpoint is pertinent as it provides a way of standing back and viewing the complexus; the way that separate parts and different ideas within a system combine to produce an overall picture. Critical complexity reminds me that the researcher's role in piecing together the different "snapshots" (Cilliers, 1998, p. 80) of the system in order to create a coherent story has to be acknowledged. Therefore, although I have attempted to develop a 'disinterested' understanding, I recognise nevertheless that my view is partial and will be subject to change over time. I must also recognise that a different researcher (and in different circumstances, I) would carry out the research and interpret the findings differently.

The English education system is unique and has its own unique history, policy makers and circumstances. Similarly each LA, school and practitioner nested within the wider education system has their own histories and unique circumstances that influence the way they respond to education policy. The abundance of connections and choice within systems means that it is difficult to predict system behaviour. However, tracing the trajectories of systems and how they have responded to infuences over time can support an understanding of "how things have come to be as they are" (Byrne, 2005, p. 98). I argue that although it cannot support an accurate understanding of

how the future may be, understanding the process of change can help to understand the present and how things might be different in future.

8.2 Contribution and implications

The main contribution of this thesis is towards an understanding of how professionals conceptualise and deal with the introduction of two-year-old provision in schools. It has a similar focus and timeframe to another study of two-year-old FEL provision (Georgeson et al., 2014) that was large-scale and cross-sector. My study adds a different dimension because it only considers practitioners in the school sector, offering a more focused analysis of a site where provision for two-year-olds was a new venture. A further contrast is that many of my interviewees had little or no experience of working with these younger children, a situation that may well be reflected in the broader school sector. Consequently there was a much higher emphasis on school readiness in my school sample than was described in Georgeson et al's larger cross-sector sample that was made-up of practitioners who were mainly well qualified and experienced in working with two-year-olds.

Given the policy push to increase two-year-old provision in schools and the amount of growth that has occurred in recent years within the school sector, further research could be done that is specific to this sector. Such research might consider schools taking children when they have turned three years-of-age as well as schools that take children for the full year of entitlement. This study was carried out when the initiative was new to schools. Now that more schools are offering two-year-old FEL places and their practice has become more embedded, I believe it would be beneficial to carry out further studies to investigate the current status of education and care and how this might be impacting on children's experiences.

My study confirms the work of Bradbury and Holmes (2016) who claim that high stakes accountability measures are distorting both the way that practitioners conceptualise children and families and how they enact education practices. It also confirms the work of Van Laere et al. (2012) who argue that the school readiness agenda can form a hierarchy between care and education. Where this study builds on earlier work is that it uses

complexity as a theoretical framework to support an understanding of how these distortions and hierarchies can develop in systems such as schools. I understand this thesis as making a contribution as an example of research using critical complexity as a theoretical framework and to inform the research methodology.

8.2.1 Reflections on the use of a critical complexity methodology

This study contributes to the larger body of work using complexity theory as an analytical framework through which to view the education sector in systemic terms. Like Trombly (2014) and Beabout (2012), I use the complexity concept of self-organising behaviours of dynamic systems to highlight how the strategy of introducing system-wide policy changes with the expectation of similar outcomes could be considered to be flawed. Nevertheless, my case schools demonstrated a remarkable similarity in how they viewed the purpose of the two-year-old FEL initiative. Parallels can be drawn between my study and that of Bates (2013) who uses complexity theory to highlight the unintended consequences of school systems responding to regimes of accountability and inspection. Where I believe my study differs is that whilst it acknowledges the effects of the 'ecology of action' on systems, it also uses complexity to theorise how the education sector is managed. When policy makers use technologies of complexity reduction, such as accountability regimes, I question whether the consequences are always 'unintended'.

I believe that case-study was an appropriate method for me to use in a complexity methodology because of the strong focus on context. It was particularly useful for deaing with Morin's dilemma of the "inseparability of the separable" (2006, p. 11) and enabled me to retain an element of complexity in my account by exploring the schools as wholes whilst simultaneously considering individuals as parts of each system. The use of case-study helped to highlight some of the instances of recursivity where beliefs about quality for two-year-olds travel through the system and can impact on the way that ECE is provided and how children and families are positioned. As such I believe that it supports Chadderton and Torrance's claim that case-study is a useful way of investigating new policies and holding "policy to

account in terms of the complex realities of implementation and the unintended consequences of policy in action" (2011, p. 54).

I believe that my use of critical complexity also contributes to what is at the moment a much less well known or used approach to research methodology in the English speaking context. Of the two examples I found, the first (Wetzels et al., 2016) uses a comparative method to explore findings; one taking complexity into account and the other approach not. The second is a complexity-thinking informed case-study of curriculum change (Hetherington, 2013). My interpretation of Morin's complexity methodology is different to these two studies. However, they all provide a means of considering multiple influences acting upon individuals and groups and also provide a structure to recognise the possible impact researchers might have on their study. As such I believe it is a useful methodology particularly for those carrying out research in their own working context.

Whilst the two studies referred to above consider the impact of context and perspective, in this study I have also tried to be sensitive to changes that have occurred over time by following the trajectories of ideas about quality, the purpose of education, and ideas linked to early intervention and social mobility. To address Morin's (2008) dilemma of 'thinking in a complex way', I followed Cilliers' (2002) recommendation and took snapshots of the system being studied. The snapshots were from business management, historical and political angles. Drawing comparisons between business management and the management of the education sector is not new. However, I believe I have made a contribution by using complexity theory to understand how multi-layered, sedimented ideas about quality have come to exist within the sector and by tracing how the trajectory of ideas about quality in business have influenced the education sector.

8.3 Concluding thoughts

Critical complexity presents modest findings because it acknowledges the impossibility of fully accounting for multiple variables and producing certainty or predictability. However, accepting this as a condition makes it possible to see things differently and as Cilliers (2005) claims, this is a responsible

rather than a weak position.   At the beginning of the thesis I stated that I did not want my research to be simply 'What are the different viewpoints about quality for two-year-olds?' or to conclude that in my 'expert' opinion some viewpoints are right and some are wrong or misguided. Nor did I want an 'anything goes – quality is in the eye of the beholder' style argument. Instead, from a critical complexity viewpoint, I wanted to explore how different understandings of quality have become established and how circumstances have developed to reach the current situation. I believe I have achieved my aim, albeit from my own particular viewpoint, aware that if others attempted to research the same topic in the same system they would carry it out differently and have different findings. I am also conscious of Cilliers' (2005) cautionary note that any claims I make can only ever be modest ones because systems change over time and therefore the research would not be replicable. That said, I believe that this research would be useful to others working in the English ECE sector, not only those working with two-year-olds, because the problems I identify in this study relating to taken-for-granted assumptions about quality could well be symptomatic of a broader trend in education.

From a complexity viewpoint, the idea that significant and irreversible change can occur in systems when feedback loops create deviations (Morin, 2006) is pertinent to an understanding of how quality is currently being framed for two-year-olds in schools. In Chapter One I said that I feared there was a danger of philosophical/moral understandings of the purpose of education (and therefore the associated understandings of what quality might mean and to whom) being drowned out by production-based understandings of education.   This research has demonstrated to me that whilst there were some multi-layered and sedimented views about quality within my case-schools, the Ofsted and DfE messages that prioritise production-based understandings were the most prevalent. I argue from a complexity viewpoint, that in order to moderate the impact of strong production-based messages about quality, ways to allow other messages to travel through the system need to be found.

In Figure 10 I highlighted the production-based conversations happening at the connection between schools and DfE/Ofsted that are well developed in order to meet accountability expectations. However, my perception is that conversations designed to aid understanding between the education process taking place in classrooms and the philosophical/moral understandings of quality that take into account the views of multiple stakeholders are in danger of i) not happening, ii) being swamped by quality definitions originating in the production-based understandings of quality and iii) not flowing two-ways. The concept of complex adaptive systems that I discuss in section 2.4 supports my interpretation of this situation in both negative and positive ways. It could signify a danger that some understandings of quality could disappear altogether resulting in diminished perspectival viewpoints. This could result in more children and families becoming disempowered instead of being able to take full advantage of the education system and the hoped for improvement in social mobility. Alternatively the concept of complex adaptive systems could support an understanding of how change might be made possible. For example, by ensuring that other ways of conceptualising quality are discussed and that there is a two-way flow of conversation between the different functions of the education process that I describe in Figure 10, the system could become more robust and more effective. This is where more attention could be more focused in the future.

My developing understanding of the English education system as a complex adaptive system supports me to consider my own role and sense of purpose within that system. An understanding of the transformational potential of complex adaptive systems leads me to believe that the future of richly connected systems cannot be predicted with accuracy and that many alternative realities are possible. The agency of a system is related to its individual context, including its history and the internal and external sub-systems and individuals interacting with it. As I am part of the system I must also acknowledge that I have the potential to impact on that system. Undertaking this research has helped me to explore how I might currently be influencing understandings of quality and how I could work differently in the future. This research has emphasised to me the importance of stimulating

and keeping open the debates on what is meant by quality from different perspectives and how quality might be achieved from these different viewpoints; not just the 'what' of outcomes, but also the 'why' and 'how' of philosophical, structural and process understandings of quality.

As a commissioner of services and 'sole arbiter of quality' the DfE is interested in outcomes and not in how they are achieved and there is currently no explicit expectation that schools discuss their own stance on quality for two-year-olds. I, and others in similar roles, have a part to play in promoting discussions about what is meant by quality for two-year-olds, making interpretations explicit rather than relying on taken-for-granted assumptions within the community of practice. Highlighting and exploring the impact of multiple systemic influences on what Morin (1999, p. 8) termed "culturally inscribed paradigms" is a crucial step in challenging some of the taken-for-granted assumptions about ECE and the children and families eligible for two-year-old FEL places. This is important because blind adherence to a production-based imperative for improved outcomes, combined with unconsciously held deficit assumptions about these children and families, could mean that the means of achieving improvement are not fully considered. It could produce a situation where, as Brooker (2015) claims, instead of increasing their cultural capital, these two-year-old FEL children in schools become further disadvantaged.

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Appendix 1: Information sheet for schools and participant consent

Research Project Title:

High Quality Provision for Two Year Olds. Exploring parents' and professionals' perceptions and experiences of Free Early Learning Places in Schools for 2 year old children.

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the project's purpose?

The demand for early education places for two year olds has increased dramatically since September 2013 when 20% of all two year olds in the country became eligible for 15 hours of free early education. September 2014 will see that demand rise further when 40% of two year olds become eligible for a place. Schools are starting to offer some of those places and the Government is planning to make it easier for them to do so by making changes to the process for schools wishing to lower their admission age.

Research suggests that to make a difference to children's outcomes, the early education establishment a child attends must be of high quality(Sylva et al, 2008). Schools are developing their provision for two year olds in a variety of ways. The aim of this research is not to find out whether one way is better than another, but is to explore the perceptions and experiences of parents taking-up places for their two year olds and those of professionals involved in offering those places. The intentions is for me to listen and learn about the different ways in which quality is understood and experienced by the range of professionals and parents in relation to 2 year old funded places in schools.

The study will take place between March 2014 and July 2015. The first phase will involve interviews lasting approximately 30 minutes with the Headteacher plus four or five practitioners working in a range of roles within the Early Years Foundation Stage. With permission, a variety of documentary evidence will be scrutinised such as school policy documents and children's records but these need not be removed from the school site. The

second phase of the project will be to approach three parents from each school with a view to having similar interviews with them for approximately 30 minutes.

Why has my school been chosen?

Schools are at different stages of developing their provision for two year olds and, for a variety of reasons the provision is following different formats. For example, some schools are taking over existing nursery provision, some are developing new provision separate from their provision for three and four year olds and some are developing provision within the same space for three and four year olds. Further schools are offering the Two Year old Free Early Learning places within their existing nurseries to 'Rising Threes' in the term that children have their third birthday. Although this is a small scale study it will still be important to learn from a range of parents and practitioners in a range of situations. It is hoped that by inviting four schools to take part in the study the different approaches to delivering the places may be represented. The aim is not to find out which is the best approach, rather it is to ensure that the perceptions and experiences captured are from a broad and representative sample. Your school has been approached as an example of one of the approaches highlighted above. For reasons of confidentiality I will not be divulging the names of the other schools involved or your own.

Does my school have to take part?

Headteachers:

It is entirely up to you (the Headteacher) whether your school is involved in the study. If you choose to take part in the study, practitioners and parents will be approached separately for their individual consents. If you decide to take part as a school you (the Headteacher) will be given this information sheet to keep (and be asked to sign a consent form, of which the school will keep a copy). As a school you can still withdraw at any time without it affecting any benefits that you are entitled to in any way. You do not have to give a reason.

All other practitioners including teachers and teaching assistants:

Even if the Senior Leadership Team of your school has agreed to take part in the study, it is still up to you to decide whether or not you want to be involved. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form, of which you will keep a copy) and you can still withdraw at any time without it affecting any benefits that you are entitled to in any way. You do not have to give a reason.

What will happen to me if I take part?

The data collection phase of the study lasts just over a year. Within this time you will be asked to take part in just one interview that will last for approximately 30 minutes. You will

be asked questions about your perceptions of quality provision for two year olds and your experiences of providing places for two year olds in your school (the questions will be provided well in advance of our conversation so that if you want to you will have the chance to think about what you want to say before my visit). The interview will be recorded and you will be given the opportunity to check the transcripts for accuracy before they are used within the research. (This means that you will be able to add or delete statements at this stage too). I will arrange a time and place that is convenient to you and so it could possibly take place within the school day. I will be asking a range of professionals within your school to take part in the study. For example, the Headteacher, the EYFS Co-ordinator, a teacher, a teaching assistant and a nursery practitioner. All of the interviews will be confidential and I will make every effort both during the research process and after the research has been published to ensure that you cannot be identified.

In the second stage of the research you may be asked to support the recruitment to the study of parents of children who have received Two Year Free Early Learning places in your school. In such cases there will be an information sheet similar to this one and a consent form that will need signing. Your involvement may be particularly important where parents speak English as an Additional Language or where they have literacy difficulties as, like you and other participants, they need to understand that their participation is entirely voluntary and that they have the right to withdraw from the study at any time without having to give a reason and without the risk of any adverse consequences for themselves or their child.

As a school you may be asked to provide access to documentary evidence related to 'quality' such as school policy documents or to records or tracking of children's progress. These documents could be accessed in school and would not have to be removed from the school site. Any information will be treated as confidential and I will make every effort both during the research process and after publication to ensure that neither the school nor any individuals can be identified.

I intend to present the findings of the research as a series of anonymised case studies capturing the perceptions and experiences of both parents and of professionals in the roles identified above. These cases will be selected at the end of the research process which could be many months after your original interview. If I was to select you as a potential case I would seek your continued permission at this point as I would want to ensure that you had the opportunity to read, correct and approve the case study which would then make an additional demand on your time. If you did not want to give permission for your 'case' to be written it would not affect your otherwise involvement in the study or affect any benefits you are entitled to in any way.

What are the possible disadvantages and risks of taking part?

There are no foreseen risks arising from the proposed research process other than the risk of breach of confidentiality. I have described above how I intend to minimise that risk and, when conducting interviews, I further intend to remind participants that talking to others outside their organisation about participation in the research risks the anonymity of their

school and therefore their own and colleagues' anonymity being compromised. At all times I will be following the XXX Safeguarding Children Board procedures and the school's Safeguarding Policy in line with 'Working Together to Safeguard Children' (DfE, 2012). This means that if I become concerned that that there is evidence or reasonable cause to believe that a child or adult is suffering, or is at risk of suffering significant or serious harm it may become necessary to share confidential information without consent.

What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this research into a new and important area of work will support me to have a better understanding of the schools offering places to 2 year olds, both now and in the future, to considerthe quality of their provision from multiple viewpoints;the school and practitioners, the parents and the children.

What happens if the research study stops earlier than expected?

In the unlikely event of this being the case all schools and individual participants will be contacted and the reasons explained to them.

What if something goes wrong?

If you wish to raise a complaint about the way you have been treated as a participant in the research you should contact me in the first instance. Thereafter you can contact my Research Supervisor, Dr Jools Page (j.m.page@sheffield.ac.uk). If you still feel that this has not been handled to your satisfaction, or if you need to report a serious adverse event that has occurred as a result of taking part in the research you should contact the University of Sheffield's Registrar and Secretary, Dr Philip Harvey (registrar@sheffield.ac.uk).

Will my taking part in this project be kept confidential?

All the information that is collected about you during the course of the research will be kept strictly confidential, except where there is a concern for a child's welfare which overrides all others aspects of the research. The audio recordings of your interview made during this research will be used only for analysis and anonymised excerpts of the transcriptions may be used to construct the case studies, be used for illustration in conference presentations and in lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings. I will store the audio recordings and transcripts securely in password protected, encrypted files on a password protected devise for a maximum of ten years after the end of the study. As this is part of my educational studies it is likely that I will need your anonymised responses and other anonymised school data to be made available to those supervising my research and your permission is specifically sought for this. Further, I am committed to ensuring that you will not be able to be identified in any reports or publications.

What will happen to the results of the research project?

The research is being undertaken in order for me to fulfil the requirements of my doctoral study (EdD) in Early Childhood Education at the University of Sheffield. The results are likely to be published in Autumn 2015 or soon after. The completed thesis will be available electronically via the University of Sheffield and its collaboration with the Electronic Theses Online Service (EThOS) at http://www.ethos.ac.uk. It is also likely that aspects of the research will be used as part of further publications and may be used for additional research.

Who is organising and funding the research?

I am funding the research but I am being supported to undertake it by the XXX Service within XXX Council.

Who has ethically reviewed the project?

This project has been ethically approved by the School of Education, University of Sheffield following a process agreed by the University Research Ethics Committee

Contact for further information

Andrea Lancaster

Address, email and telephone number supplied

Thank you for taking the time to read this information sheet.

Title of Project:

High Quality Provision for Two Year Olds. Exploring parents' and professionals' perceptions and experiences of Free Early Learning Places in Schools for 2 year old children.

Name of Researcher: Andrea Lancaster

Participant Identification Number for this project: edp11acl

Please initial box

I confirm that I have read and understand the information sheet dated March 2014 for the above project and have hadthe opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw
at any time without giving any reason.
(In such cases please contact AndreaLancaster(07736 026614).

I agree to an audio recording of my interview and understand that both the audio recording and the transcript will be encrypted and saved for a maximum of ten years after the end of the study on a password protected device.

I understand that my responses will be anonymised before analysis.
I give permission for members of Sheffield University, supporting and supervising the research, to have accessto my anonymised responses.

I agree to take part in the above research project.

_____   _____   _____

Name of Participant   Date   Signature

(*or legal representative*)

___*Andrea Lancaster*_____   _____   _____

 Lead Researcher   Date   Signature

To be signed and dated in presence of the participant

Thank you for agreeing to take part in this project.

Appendix 2: Questions to head teachers and practitioners

1. **Could you just describe to me your role within the school as it relates to the provision for two year olds?**

   How much choice did you have in taking the role / what influenced your choice in taking on the role?

   Could you describe any previous experience you have had that relates to the provision for two year olds?

   Could you tell me about any training or support you have received in this employment in relation to working with 2 year olds? (Qualifications, visits, mentoring, time spent)

   On a scale of 1 to 6 (where 1 is not at all confident and 6 is extremely confident), how confident do you feel about your role as it relates to two year olds? Could you comment on why you have given yourself that score?

2. **In your opinion, what factors do you think contributed to the school's decision to offer places for 2 year olds?**

   Are/ were any of these factors more important than others to you?

   Are/were any of these factors more important to the organisation?

   (Follow up question for senior staff). The 2 year old FEEE places are an intervention rather than a universal service and are intended to 'make a difference'. In what ways do you / will you measure your success?

3. **When thinking about the provision of early education places for two year olds, how would you describe high quality?**

   Do you think the needs of children and families accessing 2 year FEEE places the same as those of all 2 year olds? If not, what do you think are the similarities and differences?

   Do you think your interpretation of quality is similar to that of other colleagues in school? To that of the parents whose children access 2 year FEEE places? Ask for clarity and examples

4. **What do you consider to have been the successes and challenges you have encountered in creating high quality provision for 2 year olds?**

If somebody else was setting up two year old provision what would you tell them.

Final questions: Age band, Qualifications, Anonymised name

Appendix 3: Table of open codes used in initial analysis of data

Open codes	No of interviewees Commenting	Total No. of references
2 year olds are almost the same as 3 year olds.	4	5
2 year olds are just like 3 year olds	2	4
2 year olds are not like 3 and 4 year olds	2	4
Advice to others	5	11
Challenges - in operation	9	28
Challenges - parents	5	10
Challenges - setting up	7	25
Children's low levels of language	5	9
Demographics of children	9	19
Deployment of staff	5	11
Different experiences of the needs of 2 year olds and families	3	5
Different needs of 2 year FEL children	5	8
Different needs of 2 year olds.	3	5
Feelings about offering provision for 2 year olds	10	23
Investment in the school	6	9
Keyworker role	9	32
Learning from experience	6	11
Measuring success	8	11
Need for early intervention	9	12
Need in the area	6	10
Need to fill places	5	8
Need to improve school results	7	13
Needs of children	7	13
Our 3 year olds behave typically like 2 year olds.	1	1
Perceptions of parents ideas on high quality nursery provision.	14	32
Preparation for 2 year olds (CPD)	14	31
Preparation of environment	7	12
Process of setting up	6	8
Quality - general	9	21
Quality of environment	12	28
Quality of practitioners	10	25
Schools work differently to PVI and children's centres	3	12
Successes - children	6	9
Successes - environment	2	3
Successes - parents	3	4
Successes - practitioners	2	2
Teams - dynamics and experience	7	13
Toilet training	5	14
Transition - general	7	7
Transition into nursery - children	3	4
Transition into nursery - parents.	6	7
Working with parents	5	16

Appendix 4: Table of open codes relating to confidence, experience and preparations for two-year-olds

Open codes arising from answers to questions about levels of confidence, prior experience of two-year-olds and how the school made preparations	No of interviewees commenting	Total No. of references
Confidence		
Confidence from experience	4	5
Lack of relevant experience	4	5
Previous learning and experience	5	5
Trust in the team	4	5
Ways to increase confidence	13	19
Experience working with twos		
No formal experience	6	7
Personal experience of two year olds	7	8
Some formal experience	4	7
Very experienced	2	4
Training and preparation for twos		
External support	5	6
Funding the project	2	2
Learning as you go	10	15
Learning school culture	3	3
Planning changes to existing provision	7	10
Registration with Ofsted	5	9
Research	5	10
Staff to staff support	10	16
Thinking about the purpose	7	13
Training	12	14
Visits	2	4

Appendix 5: Analysis using Garvin's (1984) categories of quality

Analysis using Garvin's (1984) categories of quality. User-based and product-based categories have subsequent open coding arising from the data.	No of interviewees commenting	Total No. of references
Transcendent-based understanding		
Any references to expert/ implicit understanding	2	3
User-based understanding		
Needs of children (child development)	12	30
Needs of children (school readiness)	6	9
Needs of children (compensating for home)	11	20
Needs of parents (e.g. childcare)	8	13
Needs of parents (parenting)	4	6
Needs of parents (setting attributes)	15	32
Needs of parents (supporting education)	6	9
Needs of community or society	9	14
Needs of school	9	19
Value-based understanding		
Any references to making the most with the resources you have	3	5
Product-based understanding		
Environment quality	13	30
Cosiness	3	4
Outdoor experiences	5	6
Staff –child ratio	5	8
Group size	7	9
Play and learning opportunities	12	30
Staff quality	11	30
Relationships, attunement and belonging	14	45
Safety	5	11
Staff-child interactions	6	9
Registration and transitions (information)	10	15
Compliance with Ofsted regulations	3	5
Manufacturing – based understanding		
Input quality	13	27
Process quality	13	38
Output quality	7	10

Appendix 6: Example of further analysis of comments included within open coding of product-based understandings

Product-based understanding – structural quality		Quals related to 2s	Quals	Environment and resources	Choice and accessibility of resources	Access to outdoor or play	Familiar objects and images in environmnt	Safety	Welcoming to parents	Resources to support gross and fine motor skills
S1A1	Practitioner	Y	NVQ 3	X						
S1A2	EYFS Leader	N	Degree	X	X	X				
S1A3	Practitioner	N	NVQ 3	X				X		
S1A4	Senior Practitioner	N	Degree							
S1A5	Headteacher	N	Master	X						
S2A1	EYFS Leader	N	Degree	X						X
S2A2	Senior Practitioner	Y	NVQ 3							
S2A3	Practitioner	Y	Degree	X	X					
S2A4	Practitioner	Y	NVQ 3	X				X		
S2A5	Practitioner	N	NVQ 3	X	X	X	X			
S3A1	EYFS Leader	N	Master	X		X				X
S3A2	Senior Practitioner	Y	NVQ 3							
S3A3	Practitioner	Y	NVQ 4	X	X					
S3A4	Practitioner	Y	Master	X	X		X		X	
S3A5	Headteacher	N	Degree			X				
S4A1	Senior Practitioner	N	Degree	X	X	X	X			
S4A2	EYFS Leader	N	Degree	X						

Key:	Sycamore Primary	Willow Academy	Oak Primary	Maple Academy

Product-based understanding – process quality		Quals related to 2s	Qualifications	Staff skills and attributes	Play-based, child-led opportunities	Working with parents	Ability to progress children's learning	Support for language development
S1A1	Practitioner	Y	NVQ3		X			
S1A2	EYFS Leader	N	Degree					
S1A3	Practitioner	N	NVQ3	X				
S1A4	Senior Practitioner	N	Degree	X				
S1A5	Headteacher	N	Master					
S2A1	EYFS Leader	N	Degree					
S2A2	Senior Practitioner	Y	NVQ3		X		X	
S2A3	Practitioner	Y	Degree	X		X	X	
S2A4	Practitioner	Y	NVQ3	X	X	X	X	
S2A5	Practitioner	N	NVQ3	X				
S3A1	EYFS Leader	N	Master	X		X		X
S3A2	Senior Practitioner	Y	NVQ3	X	X		X	
S3A3	Practitioner	Y	NVQ4				X	X
S3A4	Practitioner	Y	Master	X	X			
S3A5	Headteacher	N	Degree	X	X	X	X	
S4A1	Senior Practitioner	N	Degree		X			
S4A2	EYFS Leader	N	Degree	X				

Key:	Sycamore Primary	Willow Academy	Oak Primary	Maple Academy

Appendix 7: Table showing the distribution of comments on the perceived needs of children relating to compensating for the home learning environment

User-based needs of children. Compensating for home learning environment		QUALS RELATED TO 2S	QUALS	EXPERIENCE	Heath and self care	Interesting places / experiences	Language talking	general	PSED
S1A1	Practitioner	Y	NVQ3	Y					
S1A2	EYFS Leader	N	DEGREE	N					
S1A3	Practitioner	N	NVQ3	N	X	X	X		X
S1A4	Senior Practitioner	N	DEGREE	N					
S1A5	Headteacher	N	MASTER	N					
S2A1	EYFS Leader	N	DEGREE	N		X	X		
S2A2	Senior Practitioner	Y	NVQ3	Y	X	X	X	X	
S2A3	Practitioner	Y	DEGREE	Y		X		X	
S2A4	Practitioner	Y	NVQ3	Y		X	X	X	
S2A5	Practitioner	N	NVQ3	N					
S3A1	EYFS Leader	N	MASTER	N		X	X		
S3A2	Senior Practitioner	Y	NVQ3	N		X		X	X
S3A3	Practitioner	Y	NVQ4	Y					
S3A4	Practitioner	Y	MASTER	Y	X		X	X	X
S3A5	Headteacher	N	DEGREE	N		X	X		X
S4A1	Senior Practitioner	N	DEGREE	N	X	X		X	
S4A2	EYFS Leader	N	DEGREE	N	X		X		
Key:	Sycamore Primary		Willow Academy		Oak Primary		Maple Academy		

Appendix 8: Table of open codes linked to early intervention

Early intervention - Open codes	No of interviewees Commenting	Total No. of references
Cost benefits of early intervention	2	3
The earlier the intervention the better	10	15
Types of intervention	8	18
Assessment – against developmental norms	14	21
Children come in below expected levels of development	9	18
Exposure to vocabulary / talk (linked to parenting)	7	10
Parent-child attachments	3	3
Parenting	7	13
Lack of opportunities and experiences	10	17
Stresses in home learning environment	8	15
Stresses in school environment	7	11
Reducing stress	10	27
Relationships with children	9	17
Relationships with parents	11	38
Supporting self-regulation and executive functioning	5	10
Preparing child for next stage in education	3	5
Offering age-stage appropriate expectations	10	22