Degrees of difference: A case study of Forest School in England and Denmark.

Thesis submitted for the degree of Doctor of Education at the University of Leicester

by

Melanie Jane Mackinder B.Ed.(hons), M.A.(Ed)

Bishop Grosseteste University

Is a tree planted in another continent the same tree?

(Brookes and Dahle, 2007 p.viii)

August 2020

Abstract

Degrees of difference. A case study of Forest School in England and Denmark

by

Melanie Jane Mackinder

Closely associated with the established Danish early years practice of Forest Kindergarten, Forest School in England is an alternative approach to young children playing outside. Considering the relationship between the two methods there is limited research that has directly compared the two approaches. Using an exploratory, comparative case study methodology, this project uses interviews, observations, and photo tours to explore pedagogy of Forest Learning, through adult's interpretations and children's experiences in each context. The use of the environment in each context was also investigated. Data was analysed using an emergent, thematic analysis that allowed for the exploration of common elements while also identifying differences across the two cases. Using a constructivist perspective to explore the pedagogical approaches in each context it was possible to identify that the adults in each case interpreted and enacted pedagogy differently. Practitioners interpreted Forest School using a scaffolding approach, providing activities, toys, and equipment *for* children, *in* an outside environment, whereas pedagogues co-constructed Forest Kindergarten *with* children, *through* an outdoor environment. However, the children in each case, engaged similarly in child-initiated play, away from adults in favourite places and used natural resources creatively. In addition, the familiar natural features and fixed equipment provided security from which the children developed and initiated their own play.

It was found that in each context, the three elements of adult, child, and environment, were interpreted and experienced through a constructivist pedagogy in different ways, to produce an individual interpretation of Forest Learning.

Acknowledgements

My appreciation goes to all my family, friends, and colleagues who have helped me on this doctoral journey. My gratitude goes to the participants who gave up their time to participate in this study. Thanks to Yvonne, for being aspirational and inspirational. Special thanks to Martin, Alistair, and especially William for the gift of time, and for having faith and confidence in me, especially when I lacked it in myself. Dad, thank you for providing technical support. Many thanks to my supervisor Dr Phillip Wood for his support throughout the writing of this thesis. I would also like to acknowledge the input from Dr Emma Pearson and Professor Chris Atkin, who contributed to the development of this thesis in its early stages. Lastly, thank you to the willing participants who took part in this study and helped me to understand Forest School.

Table of Contents

List of Tables

List of Figures

List of Images

Abbreviations

DCA   The Day Care Act (Denmark)

ECEC   Early Childhood Education and Care

EYFS   Early Years Framework Strategy (England)

FSA   The Forest School Association

NEF   The New Economic Foundation

OECD   Organisation for Economic Cooperation and Development

Ofsted   Office for Standards in Education (England)

MSA   Ministry of Social Affairs (Denmark)

Chapter 1 – Introduction

1.1 Introduction and background

In England, over the past 30 years, there has been a growth in parental choice and competition within all spheres of education. This trend has resulted in a move towards contrasting approaches to education from different theoretical perspectives such as Montessori or Reggio Emilia, particularly in the early years. Another example is Forest School, which has developed as a way of young children spending time in woodland locations (Forest School Association, FSA, 2019).

Originating from Denmark, the idea of Forest School developed in England in 1993 after a group of lecturers from Bridgwater College, Somerset, visited Denmark (Williams-Siegfredson, 2012). Adapting what they had seen they named their distinctive approach to young children learning outside, Forest School (Knight, 2009 and Williams-Siegfredson, 2012). Characterised as a play based 'learner centred approach' with 'hands on experiences in a woodland or natural environment' the idea of Forest School then spread (FSA., 2019 nd).

1.1.2 Initial Interest and positionality

As an early years practitioner of many years I have always recognised the value of the outside environment to provide a range of developmental and learning opportunities. For example, the physical benefits of playing outside where children can move more freely (Bilton, 2002; Fjortoft, 2004), and develop dispositions to learning such as resilience, especially when the play encourages risk taking (Sandseter, 2009; Tovey, 2010). I also acknowledge that there are social benefits from child-initiated play, particularly in the larger or more secluded spaces outside. Lastly, I appreciate the emotional benefits of the calming nature of fresh air, open spaces, and freedom the outside environment provides (Kaplan, 1995). Consequently, I have always prioritised the use of the outside environment in my practice with young children.

Currently as a university lecturer working with undergraduates in Early Childhood Studies I am in a position where I can further develop my passion for play, alongside my interest in alternative pedagogies by promoting its benefits for children's

development and early childhood practice. My initial interest in Forest School came about during a research trip to Cardiff that coincided with my son starting to 'do' Forest School at his nursery. These two factors ignited my interest and prompted some provisional research. A literature search revealed limited academic studies into Forest School as an alternative approach to young children learning by playing outside.

My background in early years education, alongside my fascination with outside play and alternative pedagogies, particularly with young children has influenced the shape and process of this study (Denzin, 1986). Consequently, this study is intentionally located in my experiences as an early years educator, for example the age of children (4-5 years) was selected based on my experience of working with that age group. In addition, the study is located in my interest in learning outside which led me to want to know more about how the phenomenon of Forest School facilitates this, by exploring both pedagogy of play and Forest School. My positionality and preferences have the potential to positively influence how I see and interpret events and social interactions, or data collected for this study. In addition, my curiosity of how Forest School facilitates learning from a socio-cultural perspective has caused me to explore the concept of Forest School using a constructivist and interpretive approach and look to its roots in Denmark for comparative purposes. The combination of my unique experience, interest and values have resulted in my doctoral research and this thesis.

1.1.3 Research aims and questions

Within the literature there are many misunderstandings, including a lack of clarity over a definition and pedagogy of Forest School. The literature explored for this study (Chapter 1 and 2) identifies the phenomenon of Forest School as an English interpretation of Danish Forest Kindergarten (Williams-Siegfredson, 2012). However, translation may have resulted in some aspects being understood differently or even adapted (Leather, 2018).

To understand more about the development of Forest School in England and its relationship with Forest Kindergarten this thesis sets out to explore the pedagogy and practice in each. It explores the way adults interpret and implement Forest Learning in each setting, alongside children's experiences and how they are shaped by adults'

understanding and enactment. By identifying similarities and differences and drawing comparisons, this study goes some way towards explaining the perceived differences between Forest School and Forest Kindergarten, from adults and children perspectives. These aims lead to the following three research questions:

RQ1: How do adults interpret and enact a pedagogy of Forest School in England and Forest Kindergarten in Denmark?

RQ2: How do children experience pedagogy in Forest School in England or Forest Kindergarten in Denmark?

RQ3: What are the similarities and differences between Forest School and Forest Kindergarten environments and how do these impact on the experiences of their users?

1.2 Context to the study

Given that the origins of Forest School in England have developed out of Danish outdoor kindergartens, this study has selected to explore both practices as a way of understanding more about pedagogy and practice in each context identifying any similarities and differences. Having established this link, it is important to now look at early years practice in each context in more depth. Understanding the socio-cultural context and background helps us to identify different values and practices that allow the two different contexts to be compared (Kelly, Dorf, Pratt and Hohmann, 2014). Looking into the history and national systems of each country offers an understanding of how current early years provision has developed and within it the place of Forest School or Kindergarten.

In keeping with terms used in each context 'pedagogue' is used throughout to refer to professionals working in Danish Forest Kindergarten whereas 'practitioner' is used to refer to professionals working in Forest School in England. The collective term 'adult' is used to apply to both. The term 'Forest Learning' is used in discussion to refer collectively to both Forest School and Forest Kindergarten. In addition, 'Forest

Learning' is used to define and refine the elements common to both Forest School and Forest Kindergarten as a synthesis of practice.

1.3 The English Context

1.3.1 Introduction

This section sets out the background to early years education in England. Political ideology has shaped early years care and education (ECEC), while also offering a context within which Forest School has developed. England has a different education system to the other countries of the UK, and as such policy has diverged between the countries in many ways. Therefore, the study sits within an English context and cannot easily be generalised in policy terms to the other countries of the UK. As this study is focused on children aged 4-5, and to ensure the two cases were as comparable as possible, in Denmark a Forest Kindergarten was selected and in England a nursery setting was chosen.

1.3.2 Current Provision for the early years

In England, compulsory schooling starts the term after a child's 5th birthday, (Clark and Waller, 2007; Marshall, 2014). The term early years is used for children under statutory school age. This phase before compulsory education is sometimes referred to as pre-school or nursery.

Currently, there are a range of full or part-time child-care options for children under compulsory school age, with government funded, part time places of 15 hours per week for 3 and 4 year olds (Gov.uk, 2018). A combination of private and state funded provision such as play group, nursery, crèche, child minders, nannies and day care are available, depending on the age of the child and the kind of care offered and required (Clark and Waller, 2007). Different provision offers a different emphasis of care and education in learning environments that have developed politically, socially, and culturally over time according to need and social policy.

1.3.3 Historical background

Compulsory education was introduced in 1870 for children over 5 years old, establishing a separation between school and pre-school that remains today. It wasn't until the turn of the century that Margaret McMillan attempted to bring care and education together for children under 5, when she pioneered an outside nursery in Deptford, based on Froebel's idea of kindergarten (Garrick, 2009). Children benefitted physically and emotionally from play and tasks that they initiated themselves such as gardening, to develop intellectual freedom, self-reliance, and independence (Joyce, 2012). In addition, McMillan encouraged children in adventurous play in the outside environment such as climbing trees (Tovey, 2010). Current child-centred provision for outdoor play with pre-school children still has its origins in McMillan's open-air nursery (Bilton, 2002).

Provision for the under-fives remained neglected by the state until 1967 when Plowden, commissioned by the state produced her landmark report. Aimed at overhauling Primary education (5-11 years), the report applied the premise that "at the heart of the educational process lies the child" (Plowden, 1967, p.9), applying Piaget's constructivist theory. Children had the freedom to direct their own learning through play and interaction with their physical environment, known as discovery learning (Garrick, 2009) which shifted the emphasis of play more firmly towards using an outside environment. At a primary school and pre-school level the idea of play became central to the work of educators, and this legacy still influences practice today (Pound, 2005). The adult's role was of a guide to plan the physical and intellectual environment and support the child's active construction of knowledge and understanding. In addition, Piaget's theory of four stages of intellectual development suggested that a child will only do things when they are developmentally ready, introducing the concept of *readiness* (Aubrey and Riley, 2016; Joyce, 2012).

To facilitate Plowden's vision of child-centred education the state set out to provide nursery education for all who wanted it (DfES, 1972). However, economic recession meant that by the 1980's there was still a short fall of nurseries. Accepted by government as a cost-effective substitute for state nurseries voluntary play groups and private provision expanded to fill the gap (Joyce, 2012). Unregulated by the state many retained free play and used the outside environment established by McMillan,

especially as they were limited by resources and space. However, within the ad hoc provision, there were no minimal training requirements. Although the NNEB provided some specialisation, there remained a limited professionalisation and mostly non-specialised work force with limited understanding of child development or theoretical knowledge (Joyce, 2012).

1.3.4 Towards regulation and standardisation

The first step towards regulation and standardisation of early years provision was in 1996, with the publication of the Desirable Learning Outcomes (DLOs), (SCAA, 1996), rebranded as the Early Learning Goals in 1997 (Wright, 2015). Based on goal orientated guidelines, the DLO's set out features of good practice and required children to achieve a large number of early years goals in 6 main areas (personal and social development; language and literacy; mathematics; knowledge and understanding of the world; physical and creative development) before entering compulsory education (SCAA, 1996). Crucially it introduced the term *foundation* regarding preparation for formal education demonstrating a move away from McMillan's legacy of play and Piaget's idea of discovery learning towards developmentally appropriate provision and a different interpretation of *readiness*.

The idea of children being biologically mature or ready originates from a 1950's biological and behaviourist perspective pioneered by Gesell (Raban, Ure and Waniganayake, 2003). Applied in this context it refers to children being ready for formal schooling. Children who were not developmentally mature enough or had insufficient experience for formal learning were identified by practitioners and then activities introduced to "hasten [their] readiness", marking a shift towards more formal activities before statutory education (Garrick, 2009, p.22). As regulation began to formalise early years practice there was less emphasis on the positive benefits of an outside learning environment, while the increase in more structured learning may have led to a further reduction in child-initiated, discovery learning as the indoor environment was given more emphasis.

1.3.5 Early Years Framework Strategy

Since, 1996 government involvement in early years policy and practice intensified, with a series of child-care strategies culminating in 2008 with the Early Years Foundation Stage Framework (EYFS, 2008). Consolidating legislation in education and care to include all providers of care for children 0-5, the EYFS has since been revised in 2014, and current at the time of this project, with minor amendments made in 2017 (Langston and Doherty, 2012). The introduction of the EYFS in 2008 was an impetus for change, as the introduction of a prescriptive framework signified a further move away from informal approaches to indoor and outdoor play within pre-school provision, towards more formal school-like practices (Wright, 2015). The high degree of prescription caused much debate and concern from early years practitioners at the time (Ellyatt, House and Simpson, 2009).

Building on the DLOs (1996) the EYFS (2008) established minimum provision requirements for young children, through six specific areas of learning (personal, social and emotional development; communication, language and literacy; problem solving reasoning and numeracy; knowledge and understanding of the world; physical development and creative development). However, the introduction of progress checks at 2 and 5 years, as well as inspections of teaching by the Office for Standards in Education (Ofsed) shifted the demands and expectations of children and practitioners (Ellyatt, House and Simpson, 2009). As a result, there was a change in emphasis from Plowden's free play legacy onto learning outcomes, giving rise to institutions planning rigorously for learning and monitoring children's progress as part of the accountability and productivity agenda, also reducing practitioner autonomy (Rogers, 2011).

While play is recommended within the framework, what is meant by play and how it should be supported is less clear, given that curriculum content and requirements were set out with an emphasis on planned, structured activities (Rogers, 2011). Outdoor play was also promoted within the EYFS (2008, p.9) and settings must provide "enough space to play and opportunities to be outdoors with freedom to explore and be physically active", although outside play was sometimes seen as a reward (Garrick, 2009, p.24). Although Wright (2015) suggests that the separate mention of outdoor play within the EYFS (2008) was influenced by the Scandinavian philosophy of playing outside, it could also be a reflection on the government document 'Learning

Outside the Classroom Manifesto' that "defined learning outside the classroom" (DfES, 2006, p.1). Both coincide with the Forest School movement gaining momentum, while in the same year O'Brien and Murray (2006) reported that bureaucracy was discouraging schools from taking children outside to participate in outside learning.

The EYFS has since been revised twice. Whilst initially appearing less prescriptive, the tension between work and play seem more evident as retaining the emphasis on assessment and monitoring coupled with an increased formalisation of outside play that should be:

> regular and planned (and) providers must provide access to an outdoor play area or, if that is not possible ensure that outdoor activities are planned and taken on a daily basis (unless circumstances make this inappropriate, for example unsafe weather conditions) (DfE, 2014, p.28).

Whilst endorsement of outside play by the EYFS could have ensured quality and equity of outdoor play and created a climate for further growth of Forest School, the opposite is true. Outdoor play, that was typically unregulated and spontaneous became more regulated and homogenised through the imposition of the EYFS (Beames and Brown, 2014). Furthermore, child-initiated play that involved choice, control, ownership and autonomy (Wood, 2010) became adult planned and structured, leaving Forest School as an alternative approach to learning outside for young children, and currently supplementary to the EYFS (Knight, 2009).

1.3.6 Summary

This section has identified that as the state began to legislate for early years provision in the 1970's, and more significantly in 1990's there has been a noticeable shift from holistic, child- initiated learning embodied in Plowden (1967) to more recent structured provision and formal teaching. The reason for this is clearly linked to pre-school children achieving specified goal related outcomes and being ready for statutory education at 5. Although the benefits of playing outside for child development and health were prioritised by McMillan, and the freedom of spontaneous play endorsed by Plowden (1967), government intervention with curriculum and goals have reduced the

prioritisation of these ideals. Typically, now less time is spent outside with children engaged in self- learning, while more time is being devoted to formal learning (Wall, Litjens, and Taguma, 2015).

1.4 The Danish Context

1.4.1 Introduction and background

This section looks early years provision in Denmark, in particular how historical, social, cultural and political contextual factors have influenced the development of Forest Kindergarten. This study is focusing on children aged 4-5 attending kindergarten as it is most similar to nursery provision in England.

1.4.2 Current provision in early years

Although Denmark is frequently grouped with Norway, Sweden and Finland as 'Scandinavia' or the 'Nordic countries', this association can be confusing because whilst similar in many ways each country has different traditions, culture, laws and separate education systems (Marshall, 2014). This study is interested in exploring Forest Kindergarten as part of early years provision, pedagogy, and practice in Denmark, as a way of understanding more about Forest School in England.

Compulsory education starts flexibly after children turn 6 (OECD, 2014). However, Danes do not consider group care before formal schooling as pre-school, *pre-* anything or school-like (Wagner, 2003). Current provision before statutory schooling is characterised by a mix of state and private ownership of early years education and care settings for children aged 0-6 years (OECD, 2000), the cost of which the state subsidises (Williams-Siegfredson, 2012). The OECD (2000) report distinguishes between the 2 generic categories of day-care facility, creche or *vuggestuer* for children aged 6 months to 2 years, and *børnehave* or Kindergarten for children aged 2 to 6 years, although a range of provision is available including child-minders, day nurseries for children 26 weeks to 3 years old, integrated nurseries for children from 3 months to 6 years and kindergartens for children age 3 to 6. All provision is based on the idea that:

all children need to spend a few hours a day in the company of other children and that children develop and are stimulated if they are engaged in certain activities (OECD, 2000, p.14).

1.4.3 Historical background

Within Danish industrialised society of the 19th century there was a concern that urbanisation brought much poverty. Ellen Key, a Swedish writer and philanthropist of that time concerned for children's health and well-being published *The Century of the Child (*Kristjansson, 2006) in 1909. She quite radically argued against the authoritarian outlook at the time by advocating to improve conditions, whilst promoting the idea of children rights through "a more child-centred pedagogy" where "children's perspectives" would guide education (Kristjansson, 2006, p.17).

Key's principles also aligned with the communitarian ideals that Froebel had developed in Germany, and both influenced the first Danish kindergarten, established in 1854 (Williams-Siegfredson, 2012). Froebel's vision of kindergarten or children's garden brought together the concepts of care and education (Garrick, 2009), with a focus on social, emotional and spiritual development alongside physical growth hence the metaphor "garden of, and for growing children" (Joyce, 2012, p.52). Children experienced fresh air, nature, socialization and free play, and through self-initiated activities children developed self-reliance and independence through self-discovery (Joyce, 2012), where children were in harmony with themselves, others and nature (Garrick, 2009).

Early years provision expanded in 1952 with *vandrebørnehave* or wandering kindergarten, where children gathered at a meeting point or cabin and went off into the woods to be collected later (Williams-Siegfredson 2012). During the 1970's an energy crisis increased an interest in nature and environmental issues, while a lack of space in Copenhagen in the 1980's coincided with the need to increase the number of women in the workforce hence the need for childcare (Williams-Siegfredson, 2007; 2012). To provide childcare the practice of *flutterbornehaven* developed and children were bussed out of crowded cities such as Copenhagen into the countryside (Williams-Siegfredson, 2012), where there was more available space and fresh air for children to "spend their day close to nature" which resonates with an outdoor lifestyle in Denmark, and still

continues today (Gulløv, 2003, p.27). Key's values coupled with Froebel's idea of kindergarten, had far reaching effects that laid the foundations for early childhood education and care (ECEC) today.

1.4.4 Early years education and care

Early years provision is founded on the vision of an egalitarian, humanist society which is embedded in the principles of the Social Democratic Model or Nordic Welfare Model and reflected in legislation such as The Day Care Act (DCA), (Ministry for Social Affairs, MSA, 2014), which encompasses the care and education of all children under 7. Although it has evolved over time, the defining principles of current social policy, including the values of social and personal well-being, children's rights, and family, align with Key's ideas of rights and child-centredness (Kristjansson, 2006; Therborn, 1993). The purpose of ECEC is to support and facilitate different family needs, including the substitution of maternal care and a home like environment especially for children who from a young age spend a high proportion of time in day care (Wagner and Einarsdottir, 2006).

Børnehave or kindergarten is an overarching term for a general approach to ECEC, although there are many different names for individual approaches (OECD, 2000). For example, *skovgruppe* (forest or wood group), *vandrebørnehave* (wandering kindergarten), *skovbørnehave* (forest kindergarten) and *flutterbørnehave (*where children are transported daily to the forest), (Williams-Siegfredson, 2012). The origins of these varied names and practices are influenced by their location, using whatever outdoor environment is near-by such as a wood or beach (Williams-Siegfredson, 2012). This diverse range of early years provision emphasises the choice and variety in early education and care for children age 0-6 years (Williams-Siegfredson, 2012), while indicating the use of the outdoors is well established and frequently involves day-long engagement (Blackwell and Pound, 2012; Gulløv, 2003).

From this variety of early years provision, there appears to be many names for what could be referred to as Forest School but there is no one type explicitly called Forest School (Williams-Siegfredson, 2012). Rather there are a range of approaches that include outdoor practice as part of their provision with children aged between 3 and 4

years old (Knight, 2013; Williams-Siegfredson 2007; 2012). Williams-Siegfredson (2012) refers to *skovbørnehave* (forest or wood kindergarten) as the most typical, making it most suitable as a comparison with Forest School, for context and age-related reasons. From here on this study will refer to the Danish case as Forest Kindergarten which is just one name for many different expressions of early years provision that uses the outdoors and specifically forests as part of accepted practice.

1.4.5 Towards structure and regulation

In 1998, the Social Service Act introduced the idea of 'learning' into early years provision for all children under 7 (Brostrom, Frokjaer, Johansson and Sandberg, 2014). Prior to this there was no curriculum documentation or requirement for settings to produce individual statements. Then in 2004, central government issued the Day Care Act or DCA (MSA., 2004). The act covers "objectives, framework and responsibilities…for the welfare, development and learning through socio-pedagogical facilities" making it law for each provider to use "appropriate pedagogical approaches" (MSA, 2014, p.1). The emphasis is on child-centred, child-initiated, and play-based care, with a strong focus on social and emotional development (Williams-Siegfredson, 2007; 2012). Revised in 2014, the current version now contains 6 areas of learning: personal development; social development; language; body and movement; nature and natural phenomenon and cultural expression and values (MSA, 2014, p.3). There are no state regulated formal assessments or monitoring programmes beyond health and safety requirements.

Although the 1998 Act established the concept of learning, the state holds a persuasive stance (Adams, 2014) rather than direct control (Wagner, 2003). With only a few structural elements to the legislation and pedagogy open to interpretation the OECD (2000) view it as a *soft* approach (Wall, Litjens, and Taguma, 2015). Minimal emphasis on a formalised curriculum, and more focus on pedagogy and individual, localised provision leaves scope for practice such as Forest Kindergarten (Williams-Siegfredson, 2005). Each institution is required to set out its own unique pedagogical aims with the exact needs of the setting and client group, including how they facilitate play, learning and child development incorporating the use of the local environment. Within the document professionals or pedagogues (used throughout to refer to Danish childcare

professionals) are trusted and considered best placed to lead and make pedagogical decisions. In keeping with the democratic, communitarian principles and egalitarian vision within society, this personalised document is then approved by the local *kommune*.

1.4.6 Summary

Danish early years provision was founded on Froebel's ideas of kindergarten. Over time provision has adapted to meet the demands of the democratic principles within Danish society, including the place of children's rights. Care and education remain at the centre of practice and pedagogy, which is child-centred and play-based. The more recent state-imposed guidance shifted emphasis towards learning, although pedagogy, play and individuality remain core features.

1.5 Conclusion

The historical origins of ECEC in England and Denmark were based on a similar set of circumstances relating to poverty and health, (while the pioneering philosophy of ECEC is also comparable). Froebel's ideas of kindergarten, which linked being outside with health and well-being as a fundamental part of child development, were adopted by McMillan in England, and Key in Denmark. However, over-time shifts in social and political policy have diverged resulting in different early childhood pedagogy and practice. Statutory education in England starts at 5, although practices in pre-school have become more formalised and school-like with the introduction of a prescriptive curriculum and monitoring of progress they remain child-centred. In England, educators have limited autonomy so outdoor experiences for young children can be limited, whereas in Denmark statutory education does not start until children are 6, whilst provision before school is valued. In Denmark, a fluid curriculum encourages free play and child-initiated learning, lack of formal assessment means that the pedagogues have autonomy to develop practice through different pedagogical approaches. Danish society still prioritises an outdoor lifestyle and the developmental benefits of learning outside with young children. While both countries have a form of Forest School each is relative to its context and reflected in the particular differences

identified there. Understanding the effect of these similarities and differences is at the heart of this work.

1.6 Outline of the remaining chapters

The thesis is organised into 6 further chapters including the theoretical framework for the thesis, the methodological outline and presentation of data.

Chapter two begins with a review of the literature relating to Forest School in England and Forest Kindergarten in Denmark, drawing out the main features of each approach, and forms a conceptual framework and a hypothesis relating to the pedagogy of Forest Learning. The next section sets out a constructivist theoretical foundation, that includes the key terminology used for the study, followed by an explanation of the main characteristics of play, and where key terminology is explained.

The main characteristics of case study methodology are set out in chapter three, in particular how they have been applied to this comparative study and the corresponding ontology and epistemology. Before supplying the detail of the data collection methods chosen, and their suitability for this project, ethical considerations relating to this study are set out. Next, follows an explanation of how an emergent thematic analytical framework was used to explore and understand the data.

Chapter four presents the findings from the Danish Forest Kindergarten case. Evidence is presented through main themes arising from the data including the environment and location, the pedagogue's role and activity, and children's experiences including play.

Chapter five sets out the findings from the English Forest School case using headings that are representative of the data collected and are therefore different to the headings used in the Danish case. Headings used in the Forest School case include, the environment or outside space, the practitioner's role including planned focus activities, and children's experiences, including their favourite places to play.

Using a constructivist perspective, chapter six returns to the research questions and brings together the main findings of the both parts of the chapter discussing the similarities and differences across the two cases. With reference to adults and children's experiences and interpretations of pedagogy and the role of the environment in each

context, this chapter identifies the main features from the two cases and present them as a new model of Forest Learning.

Chapter seven concludes by reviewing the study, considering the major conclusions of the project and its contribution to the field of Forest School research, making recommendations for future research, and implications for practice. The conclusion also evaluates the methodology and research process, reflecting on any potential for bias within the study, while also suggesting improvements.

Chapter 2 – Literature Review

2.1 Introduction

The previous chapter presented a background to early childhood education and care (ECEC) in England and Denmark and established that Forest School is a relatively new and alternative approach to outside learning, that sits alongside the Early Years Framework Strategy (EYFS) in England, whereas Forest Kindergarten is part of usual early years provision in Denmark.

Section one of this chapter charts the development of literature that has developed around Forest School since its inception in the 1990's. Then section two critically examines the body of literature around kindergarten, specifically 'Forest' Kindergarten. Each section uses a different structure, with headings that reflect the literature and elements that emerge from it, unique to each case. To summarise a synthesis of both literatures sets out the similarities and differences between the two approaches which is then conceptualised in a table. The last section sets out a constructivist theoretical framework, alongside a pedagogy of play, explaining the key terms used throughout the study.

For the purpose of this thesis the term Forest School is used to refer to the practice in England as defined earlier (Section 1.1), while the term Forest Kindergarten is used in reference to the practice in Denmark (Section 1.4.4). Forest Learning will be used as an overarching term to refer to both Forest School and Forest Kindergarten simultaneously. Reflecting the terms used in each context, practitioner is used to refer to early years professionals working in Forest School, whereas pedagogue is used to refer to professionals working in Forest Kindergarten.

2.2 Forest School

Forest School as outlined in chapter one is a specific way of young children playing outside, although in England the idea of Forest School is a slippery notion and is difficult to define. Sessions of Forest School are described as a "fringe activity" (Waite, Bolling and Bentsen, 2015, p.16) and usually happen alongside nursery provision, once a week for a morning or afternoon (Knight, 2009; 2012). This time allocation seems to have emerged out of convenience, as it roughly corresponds to an average morning or afternoon nursery session. Below is a brief history of the development of Forest School showing the main trends and challenges involved in the development of the movement.

2.2.1 Early Studies

Since the 1990's, the practice of Forest School has spread across the member countries of the UK (England, Wales, Scotland, and Northern Ireland). While there have been many studies focusing on outdoor learning with young children, there are still only a limited number of studies that focus specifically on Forest School (Tovey, 2010; Maynard, 2007a). It wasn't until after 2000 that exploratory studies into Forest School began to be published (Swarbrick, Eastwood and Tutton, 2004), as until then little was known about the process, practice, underlying pedagogy or theoretical underpinning of Forest School. As Forest School was a new movement these studies initially relied on anecdotal evidence (Swarbrick, Eastwood and Tutton, 2004) and literature from outdoor education, resulting in a limited knowledge of the underlying pedagogy or theoretical underpinning of Forest School, as well as scant understanding of practical organisation and implementation.

In a first attempt to understand children's experiences and the benefits of Forest School, Massey (2002) produced a report. Her year-long study stated that Forest School took place in a woodland environment and activity started from the child's interests, which she claimed were both adopted from a Scandinavian model. Depending on the demands of the activity children were observed spontaneously playing on their own, in pairs and in groups, as social interactions were seen to develop alongside other activity. While children were allowed time to develop and revisit these interests.

Adults were identified as 'sensitive coordinators' who supported individual needs for example, children's use of tools (Massey, 2002, p.7), while exposure to risk was understood by adults as challenging children out of their 'comfort zone' (Massey, 2002, p.5). Additionally, practitioners planned an appropriate programme to meet curriculum guidance requirements at the time (QCA., DfEE., 2000). Although trained Forest Leaders are briefly mentioned there was no insight into what this training involved (Massey, 2002).

Following Massey (2002), Eastwood and Mitchell's (2003) exploratory study looked at how Forest School was organised, as well as the benefits. Both studies suggested learning was based on children's innate motivation to learn outside, children were encouraged to initiate activities for themselves, make choices and had opportunities to take risks. Both studies suggested that emphasis on the child's interests made Forest School different to other approaches to outside learning. To maximise the potential of Forest School and develop an understanding, appreciation and care for the natural environment, Eastwood and Mitchell (2003) recommended regular experiences in woodland throughout the year. They also recognised that Forest School was led by Forest Leaders with specific training in Forest School pedagogy but did not offer detail.

Later in 2005, Davis and Waite used a range of methods and data from eight mini research projects to identify the "opportunities and challenges of Forest School" (p.1), producing the most comprehensive report at that time. Recognising the "lack of literature", Davis and Waite (2005, p.4) also used outdoor learning literature and Danish sources to provide some background. The comparative study evaluated Forest School and observed a mix of child-initiated play and a range of activities with a specific learning focus, which is different to the spontaneous activity suggested by Massey (2002) and Eastwood and Mitchell (2003). Davis and Waite (2005) mapped findings to the six areas of curriculum guidance (QCA, DfEE, 2000), which could have emphasised the learning outcomes of the activities.

By comparing locations, Davis and Waite (2005) identified that different environments can affect the provision, especially as the study sites were chosen specifically to maximise opportunities for outside play. Building on the findings of earlier studies by Massey (2002) and Eastwood and Mitchell (2003) that identified the significance of trained Forest School Leaders, Davis and Waite (2005) noted a difference in attitude

between trained and untrained practitioners, particularly toward children's behaviours. They concluded that pedagogical principles need further clarification, including the benefits of play and the effect of different locations on provision.

A more complete picture of Forest School did not exist at that time, because of the uncoordinated and limited research available had resulted in disparate aspects being explored. For example, both Massey (2002) and Eastwood and Mitchell (2003) were working separately to try and understand how using a woodland and pedagogy of child-initiated learning worked. Findings from both studies identified child-initiated activity and the use of woodland as a learning environment that was very close to Danish Forest Kindergarten. By 2005, Davis and Waite had identified more variation in the programmes they examined and recognised that different outside environments could impact differently on outcomes, while also acknowledging the role that adults play in delivering the programme. At this time there was no one idea of what represents typical practice or underlying pedagogy or theoretical underpinning, and it was evident that more clarity was needed (Davis and Waite, 2005). While the discrepancies identified could be because of difference in interpretation, or variation of location, they could also mark a shift in the diversification of Forest School.

2.2.2 A common thread

Out of the growing interest in Forest School, The New Economic Foundation (NEF) funded a study to evaluate the impact of Forest School on children. This 2-phase study was carried out in Wales and England and was published as two documents. The first *Such enthusiasm- A joy to see,* reported on the findings from three English case studies, and tracked 24 children over 8 months, with the aim of identifying similar impact and benefits across both phases (Murray and O'Brien, 2005). However, Leather (2013, p.13) critiques the validity of the report as it applied a definition of Forest School created from the unpublished Welsh phase, as "unchallenged" facts. The second report *A marvellous opportunity for children to learn,* consolidated findings from both phases of the study in Wales and England (O'Brien and Murray, 2006).

Both reports use the definition provided by the Forest School Association (FSA, 2005), an organisation and website formed as a professional body and voice of UK Forest School, describing it as an:

inspirational process that offers children, young people, and adults, regular opportunities to achieve and develop confidence and self-esteem through hands on learning experiences in a woodland environment.

While this definition is useful it is not extensive as it fails to provide detail relating to practice and pedagogy. However, it has been used uncritically in later literature by Knight (2009) as a core definition, although Knight does expand on it with useful examples. Murry and O'Brien (2005) and O'Brien and Murray (2006) also add their own five key features of Forest School (Table 2.1). Both reports acknowledge that these features are not "unique", to Forest School but when used "in combination" in an appropriate location they create an experience that sets "Forest School apart from other outdoor learning" creating a *common thread* (Murray and O'Brien, 2005, p.5; O'Brien and Murray, 2006, p.6). Leather (2018) is concerned that their definition could be used in future research without a critical evaluation.

Both reports, similar to Eastwood and Mitchell (2003) and Massey (2002), promoted regular contact with a wooded or wild outside space in all weathers, although Murry and O'Brien (2005) and O'Brien and Murray (2006) accept that *regular* can mean different things, such as weekly, fortnightly, morning, afternoon or whole day. For the first time, expanding on Davis and Waite's (2005) exemplars, each report provides a detailed example of a Forest School session (Murray and O'Brien, 2006; O'Brien and Murray, 2005). Like previous studies (Eastwood and Mitchell, 2003; Massey, 2002) child-initiated play was seen to allow children to explore using their senses and discover the outside for themselves (Mooney, 2013), while the terms child-initiated and child-centred play are used interchangeably, with little explanation. The individual nature of Forest Learning is emphasised through sessions being limited to small groups with high adult child ratios. There was emphasis on strict safety routines and firmly established boundaries implemented to protect children from harm (Murray and O'Brien, 2005; O'Brien and Murray, 2006).

The NEF study also presented six 'positive outcomes' presented as eight themes as well as "new perspectives" and "ripple effects beyond Forest School" (Murray and O'Brien, 2005, p.6). Broadly corresponding to curriculum areas at that time themes included confidence, social skills, language and communication, motivation and concentration, physical skills and knowledge and understanding. With the limited information

	"5 Key features" (Murray and O'Brien, 2005, p. 5-6 O'Brien and Murray, 2006, p. 4).	8 "Key features" (Knight, 2009, p.15-17).	"6 Principles" F. S. A (Wellings, 2012, n.d.).	
Locations	(1) Use of a woodland setting	(1) The setting is "not the usual one" preferably but not exclusively a wood	(2) Takes place in a woodland or natural wooded environment	Locations
Process and pedagogy	(3) Learning is linked to the National Curriculum and Foundation Stage objectives. • using innovative approaches to learning • encourages development of innate curiosity and motiivation to learn (4) Freedom to explore using multiple senses • encourages creative, diverse and imaginative play • develop own learning styles at own pace • discover for themselves	(6) Learning is play-based and as far as possible child-initiated and child led	(6) Uses a range of learner-centred processes to create a community for development and learning • a learner centred pedagogical approach • responsive to needs and interests of learners • play and choice integral Practitioner: • uses observations to "scaffold" and tailor learning • models pedagogy through careful planning • appropriate dialogue, builds relationships (3) Aims to promote the holistic development of all those involved, fostering resilient, confident, independent and creative learners.	Process and pedagogy
Time/Frequency	(5) Regular contact . . . over a significant period of time	(3) Happens over time 6-10 week blocks One half day per week (7) Blocks and sessions have beginnings and ends	(1) A long term process with frequent and regular sessions in a local, natural space, not a one-off visit. Planning, adaptation, observations and reviewing are integral elements	Time/Frequency
Safety/Risk	(2) A high ratio of adults to pupils allows for children to undertake tasks and play activities that challenge them but do not put them at undue risk of harm	(2) Safe as reasonably possible to facilitate risk taking (5) Trust is central children respond in predictable ways to certain stimuli	(4) Offers learners the opportunity to take supported risks appropriate to the environment and themselves	Safety/Risk
Training		(8) Sessions are led by trained staff	(5) Run by qualified Forest School Practitioners who continuously develop their professional practice	Training
		(4) There is no such thing as bad weather only bad clothing.		

Table 2.1. To show a synthesis of the main characteristics of Forest School.

available at the time, these findings expanded understanding of the benefits of Forest School beyond Massey's (2002) initial discoveries. However, Leather's (2018) concerns were realised as both NEF reports were influential to future research for example, Borradaile (2006) and Knight (2009) replicated the studies, with future literature accepting these definitions unchallenged.

The NEF studies identify that the skill and role of the practitioner is central to the approach, (Davis and Waite, 2005; Eastwood and Mitchell, 2003; Massey, 2002), although Murray and O'Brien, (2005) and O'Brien and Murray (2006) do not stipulate that training is essential like Eastwood and Mitchell (2003). The main features of Forest School identified by the NEF studies have been presented in Table 2.1. The numbers relate to each of the principles or characteristics identified in each definition of Forest School and are synthesised according to similar ideas such as location and pedagogy.

2.2.3 Three elements

At this point, early studies (Davis and Waite, 2005; Eastwood and Mitchell, 2003; Massey, 2002; Murray and O'Brien, 2005 and O'Brien and Murray, 2006) emphasised the uncoordinated approach to research, which resulted in a lack of detail regarding a pedagogy of Forest School. However, what is beginning to emerge are three areas of interest including the location or environment, children's experiences, which varied in each study between self-initiated and adult-directed play, and the practitioner's role. These emerging themes are explored in more depth next.

2.2.3.1 Location and environment

Within the literature so far there has been an emphasis on the location of Forest School being in or near a wood or forest (Eastwood and Mitchell, 2003; Massey, 2002; Murray and O'Brien, 2005 and O'Brien and Murray, 2006), while there has been less focus on the physical environment and its features or the learning environment, even though different environments can affect provision and practice (Davis and Waite, 2005). Waite, Davis and Brown (2006) reaffirm that Forest School takes place in a wooded environment, and they posit the outside environment should be the *context* for learning, rather than the *focus*. Maynard's (2007b) findings suggest that how the learning environment is constructed by the practitioners and children using it, in relation to pedagogical principles is important. Differences in individual

sites, natural features and their use indicates a variety of interpretations requires further investigation. In particular, the relationship between the practitioner's interpretation and construction of the outside space, the affordance or opportunities that exist in the natural environment it's properties and what it provides (Gibson,1977), in addition to how children perceive and use it in relation to the perception of risk and how safety measures influence the levels of freedom and independence children experience.

2.2.3.2 Child-centred and child-initiated learning

Initially, Massey (2002) and Eastwood and Mitchell (2003) and later Murray and O'Brien (2005), O'Brien and Murray (2006) and Knight (2009), identified the unique starting point of Forest School as its child-centred, developmentally appropriate and child-initiated philosophy that is based on the child's interests, that differentiates it from other forms of outside learning. To find out more about the underlying pedagogical principles of Forest School and build on Davis and Waite's (2005) earlier findings, Waite, Davis and Brown (2006) targeted trained Forest School Leaders in their study. Although they were disappointed with the low response rate to their questionnaires, Waite, Davis and Brown (2006) similar to previous studies (Massey, 2002; Eastwood and Mitchell, 2003; Murray and O'Brien, 2005; O'Brien and Murray, 2006), saw child-initiated learning facilitated through play. However, they also identified a "tight structure" within which Forest School operated, with a high proportion of adult-led activity with free play only occurring "in-between" these formal activities, although the imposed structure reduced as the children gained in confidence and were able to take the lead (Waite, Davis and Brown, 2006, p.11).

This discovery marked a shift away from the emphasis of Forest School as spontaneous child-initiated play identified earlier (Eastwood and Mitchell, 2003; Massey, 2002) as being close to the Danish model, towards a more adult directed approach and confirmed findings from an earlier study by Davis and Waite (2005). Findings from both Davis and Waite (2005) and Waite, Davis and Brown (2006), suggest that further investigation is required to explore the degree to which activities are either child or adult-initiated and play-based, as well as the role of the practitioner in facilitating Forest School as part of pedagogical practice.

2.2.3.3 The practitioner

Maynard's (2007b, p.320) "initial exploration" identified the adult's role in facilitating children's autonomy and independence. She made a connection between children having secure relationships with adults as a platform from which they can extend and challenge themselves, particularly in relation to risky, physical activity. Maynard (2007c) linked differences in adults' attitudes with their management of the difficult and challenging topography of the outside environment that resulted in more risky play for children. Maynard (2007b) also recognised that some practitioners had controlling attitudes which presented as over-managed play which limited children's independence and autonomy. Similar to Maynard (2007b) and Waite and Davis (2007), Maynard (2007a, p. 385) found that teachers "set tight boundaries" and were "directive and protective" in style and provision because they had curriculum targets to meet. Tovey (2010) attributed an over-reliance on planned activities rather than on child-initiated pedagogy to curriculum pressure and target setting, while Maynard (2007a) suggested that Forest School leaders who adopted a more scaffolding approach may have been under less pressure from the demands of curriculum and monitoring.

Maynard (2007a) posited the differences she identified in pedagogical approach could be based on Forest School 'leaders' *with* training, and **'teachers'** *with no* Forest School training, a distinction also noted by Davis and Waite (2005) in relation to attitude towards behaviour. Further, practitioners resorted to what they know based on practice inside, habit and familiarity (Maynard, 2007a). Alternatively, Waite and Davis, (2007) suggested the different boundaries they saw imposed by practitioners were a way to control or manage behaviour and learning. Significantly all three studies (Davis and Waite, 2007; Maynard, 2007a; 2007b) stress the importance of allowing children space and time to think before adults intervene.

The beginnings of structure and adult imposed boundaries that started to emerge in the NEF reports (Murray and O'Brien, 2005; O'Brien and Murray 2006), was reaffirmed by Waite, Davis and Brown (2006) who revealed some structure and control by adults. Later, Waite and Davis (2007) saw a distinct divide between adult-led activities and play. The imposition of structure and adult activities is clearly a move away from Danish principles identified by Massey (2002) and Eastwood and Mitchell (2003). However, because of the lack of research it is difficult to know if this structure was present but not identified within earlier research, or

whether it is a shift towards regulation. What is certain is that more research is required to provide better understanding, coherence, and consistency of approach.

There is a perception that activities children engage in outdoors are risky compared with those undertaken indoors (Knight, 2013). In a less familiar physical learning environment practitioners are not always able to predict what children will do or learn, making of hard for some practitioners to adopt a child-initiated, play-based pedagogy (Waite and Davis, 2007). To be comfortable with using a play-based pedagogy, especially where there is a risk of failure requires secure theoretical understanding of how children learn through play, and specifically outside (Knight, 2013). As a result, some practitioners may struggle to adapt their familiar behaviour and adult-directed style for a more facilitatory role outside (Waite and Davis, 2007), especially as employing a child-initiated, play pedagogy can be "risky" or unpredictable in terms of outcomes for practitioners (Maynard, 2007a, p.379). Davis, Waite and Brown, (2006, p.12) identified the transmission teaching or scaffolding of tasks in small chunks to guarantee success and identified the adult interactions as "natural and intuitive", akin to "parenting", responding to individual needs arising from skilled observation. Swarbrick, Eastwood and Tutton, (2004, p.143) also recognised an approach that supported independent exploration through "careful nurturing".

Across the studies that explore the practitioner role there is an emerging variation in approach between child-initiated play facilitated by practitioners using pedagogically appropriate practice and structured, adult-led, planned learning. This tension warrants further investigation, especially when the difference between the rhetoric and reality of play based learning could be inherent in early years practice and not specific to Forest School (Wood, 2010). However, how practitioners interpret and implement the core principles and understand the pedagogy of Forest School impacts directly on children's experiences (Maynard, 2007b).

2.2.4 A turning point?

In 2009, Sara Knight, now a leading author on Forest School published her first book 'Forest School and Outdoor Learning in the Early Years'. This was a turning point for 3 reasons. First, Knight (2009) provided some much-needed clarity by extending the definition of Forest School suggested by Murray and O'Brien's (2005) into 8 key features (Table 2.1) and detailed case studies. She also offered a background to Forest School in England and Denmark and made

clear links to theoretical perspectives such as Froebel, Montessori, and Outdoor Education, yet there was a hesitancy in using the term pedagogy.

Lastly, by compiling this information as a book Knight opened-up Forest School to a new and wider audience. Her practical style informed by her years as a play worker, early years practitioner, and academic background, resulted in an easy to use guide for early years practitioners. Publication coincided with the introduction of the EYFS in 2008, which recognised the importance of outside play and may have contributed to the popularity of Forest School and Knight's position as a leading voice in the field. As seen earlier with Davis and Waite (2005) Forest School ideas map easily to the previous 6 areas of curriculum guidance and child development, maximising the potential of Forest School to deliver statutory requirements (Knight, 2012). In an increasingly regulated early years context, the play-based and child-led outside learning attributed to Forest School may have had additional appeal contributing to the increased interest and growth in Forest School. However, the introduction of an early years curriculum could result in adding a further layer of formalisation to a practice that was starting to become more structured and adult-led (Murray and O'Brien, 2005; O'Brien and Murray, 2006; Waite, Davis and Brown, 2006).

Throughout all her writing Knight (2009; 2012; 2013; 2017) is consistent in her approach to Forest School retaining the same 8 features. They broadly relate to the three aspects of location and environment, practitioner role and child-initiated learning identified in earlier research, as part of what makes Forest School different to other ways of playing outside, with only minor adaptations (Table 2.1). In trying to tease out the important elements of Forest School three definitions of Forest School have been synthesised into Table 2.1. Coming from three different perspectives, Murray and O'Brien and Murray (2005) and Murray and O'Brien (2006) from a research basis, Knight's (2009) from experience and case studies although not empirically studied and Wellings (2012) in consultation with the Forest School community have some areas of agreement, although there remain many areas that remain contested (Leather, 2018).

2.2.5 Call for a National Model

From the differences starting to appear in research, and highlighted in this literature review, it is clear there is not a single definition of Forest School (Knight, 2009). Leather (2018) attributes this lack of clarity to the rapid spread of Forest School ideas, poorly articulated theoretical and philosophical underpinning, alongside limited research evidence. Without consensus over

approach Knight (2013) and Leather (2018) suggest there is a danger that Forest School becomes more technical and mechanistic than was first identified by Massey (2002) and Eastwood and Mitchell (2003), particularly in a context where in recent years there have been increased demands on practitioners from the EYFS and government assessments which have directed early learning towards a production and outcome discourse (Maynard, 2007a).

In addition, different voices have emerged within the literature, each have a different purpose such as developing self-esteem (Swarbrick, Eastwood and Tutton, 2004), or reports written from different perspectives, such as teachers, Forest School Leaders, academics and outdoor educators. Furthermore, the explanation of how Forest School is different from other approaches of outdoor learning, how it is specifically used for young children and any underpinning pedagogy is lacking. Consequently, Cree (2009) calls for a collective idea of practice, while Knight (2009, p.14) acknowledging the "minefield" calls for "robust discussion and debate" to lead to a "shared national model". However, Dillon et al., (2005) warn to achieve consensus through a single model could result in an oversimplification, diluting the original idea (Knight, 2013). Leather (2018, p.11) questions whether a "shared national model' is needed, desired …[or] achievable" as there is a danger that standardised practice limits the potential of Forest School.

2.2.6 Pedagogy

In response Wellings (2012), on behalf of the Forest School Association (FSA), building on previous studies and in consultation with the Forest School community through a working group (Knight, 2013) produced 6 principles of practice set out in Table 2.1. For the first time the 6 principles clearly express a pedagogical approach, while also including other areas explored here in the literature (Wellings, 2012). Although Wellings (2012) states that Forest School is based on a learner-centred pedagogy, elsewhere there is limited reference to pedagogy, apart from Waite, Davis and Brown (2006) who explicitly mention it. Where pedagogy is referred to it is not always clearly or explicitly defined or consistently articulated, although some connections to theoretical ideas are made by Massey (2002) and Knight (2009). Leather (2018) furthers that a child-initiated pedagogy is frequently missing in its English translation. Although he has not carried out empirical research on which to base these claims, his critique highlights an inability to facilitate child-initiated play remains problematic in Forest School (Leather, 2018).

Looking at effective pedagogy and practice in England, Siraj-Blatchford, Sylva, Muttock, Gilden and Bell, (2002) suggest that where pedagogy is defined broadly, it can often be conflated with curriculum. Pedagogy is the art, science, and craft of teaching, whereas curriculum is the knowledge, skills and values learned by children in educational settings (Siraj-Blatchford et al., 2002). Siraj-Blatchford et al., (2002) identify that pedagogy in the early years should include provision for play and exploration, and to be effective and achieve educational goals pedagogy should be instructive rather than involve teaching (Creemers, 1994). Gage (1985) argues for a scientific basis for pedagogy, although he suggests that for learning to occur teachers creatively apply their general pedagogical knowledge to the individual circumstances, unique children, and through specific events. Thus, pedagogy is the interactive process between teacher and learner and to the learning environment, which is represented in the relational model, figure 2.1 below.
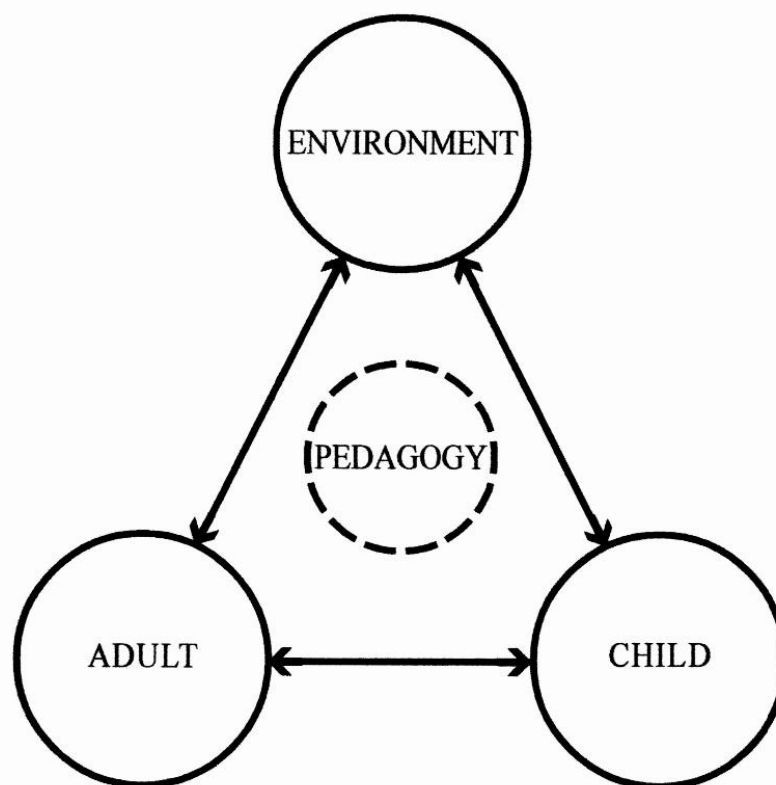
Figure 2.1. The relationship between the environment, child, practitioners, and pedagogy in Forest School.

While pedagogy may be at the centre of Forest School practice (Figure 2.1) apart from Waite, Davis and Brown (2006) and Wellings (2012) in literature there is limited articulation of pedagogical principles in literature, which is represented by the dotted lines and no arrows linking pedagogy to the three elements of child, adult and environment. In part, this gap could be because of a general reluctance by practitioners to discuss pedagogy (Siraj-Blatchford et al., 2002), as it is "seldom used in English writing about education" (Watkins and Mortimore, 1999, p.1). Even though Knight (2012) identified that practitioners lack of understanding of a pedagogy of outdoor play could be the biggest barrier to developing better outdoor provision, there is an assumption within literature that the practitioner will apply their personal understanding and beliefs concerning how children learn outside to their practice (Knight, 2009). This strategy is risky as it increases the potential for original idea being "lost through lack of understanding" (Knight, 2013, p.13). Therefore, it is important that there is agreement over the main characteristics of Forest School.

Evidence from this literature review suggests that Forest School practice has evolved, adapted or been mis-interpreted beyond the original idea based on Danish practice created at Bridgwater College, and identified in early research by Massey (2002) and Eastwood and Mitchell (2003). These initial studies, were important at the time as they led the way in forming the foundations on which later studies were based, but with hindsight it can be acknowledged that they were "fuzzy evaluations of implemented Forest School programmes" which "reaffirm(ed) anticipated benefits" (Waite, Bolling and Bentsen, 2015, p.4) rather than unravelling the how and why of pedagogical principles or theoretical underpinning (Scott, Reid and Jones, 2003). Consequently, they offer a limited understanding into why particular activities or pedagogies were used (Waite, Bolling and Bentsen, 2015). However, a balance needs to be struck between an over prescriptive framework and working model that allows for the dynamic qualities seen in the Danish model alongside a way of working within a more structured context in England.

Whilst accepting that there might be "more than one 'right' answer" (Knight, 2013, p.6) any further formalisation may result in a loss of the flexibility that makes Forest School unique (Leather, 2018). Consequently, any model should evolve, respond to practice and be open to interpretation as part of the dynamic process in practice (Cree, 2009). However, it must also be acknowledged that since Massey (2002) and Eastwood and Mitchell's (2003) early studies, more recent research has identified so much that has been "lost in translation" (Leather, 2018, p.5) as Forest School practice drifts away from the Danish Forest Kindergarten roots of child-initiated practice, where the environment is the most important resource, that adapts according

to the children and adults using it. Hence the need for this study to look at the practice of Forest School alongside Forest Kindergarten to fill this gap. It is only through a synthesis of all the available information and comparison between the two approaches that any "common threads" can be identified, making it possible to discern what makes Forest School "special" and setting it apart from other ways of learning outside (Murray and O'Brien 2005, p.11) the main aspects summarised here.

2.2.6.1 Three components of Forest School

In trying to tease out the pedagogical principles of Forest School three main areas came to light out of this literature review, the environment or location, the child, and the adult, are also identified by Gage (1985), as central to understanding the pedagogy. Represented with two-way directional arrows in figure 2.1 the practice of Forest School is identified from the literature as the dynamic, interactive relationship between environment or location, the child, and the adult. Although pedagogy is at the centre of practice (Figure 2.1) it has not always been clearly articulated (Leather, 2013), and therefore represented by a broken line. In addition, as there is no evidence of clear and direct interaction between pedagogy and the three component parts (environment, child, and adult), no interaction is represented.

2.2.6.1.1 Location and environment

Since Knight's early work in 2009 (Table 2.1) more research has filtered through into practice, so that now there appears to be a mismatch between her key features and more recent findings. For example, Massey (2002); Eastwood and Mitchell (2003); Murray and O'Brien (2005); O'Brien and Murray (2006), Maynard (2007a, 2007b, 2007c) and Wellings (2012) all acknowledge that Forest School takes place in a woodland or natural wooded environment, as it is essential for the learner to have access to the natural world. While Knight (2012, p.2) explains that while using a wood is "preferable" any outdoor location is suitable (even a beach) provided it is "not the usual one", as the original Forest School started on a playing field at Bridgwater College. She posits that Forest School is a way of "facilitating learning outdoors" and associated with a specific "special" place where Forest School rules apply (Knight, 2012, p.15). Knight (2009) further states that although location is important, the rules of Forest School define what it is as they are different to *school* rules. The rules or rituals mostly relate to safety and establish consistency and familiarity to develop stability and security from which the

children can explore and develop the idea of children protecting themselves from harm (Knight, 2013). For example, a song "signals" that children should return to base camp, boundaries mark out a safe area and sessions should have a clear ending (Knight, 2009, p.84).

Further, Knight (2013) claims the natural environment is the most important resource of Forest School as it motivates learning and provides everything to support learning and children can locate the resources they need for play, such as sticks and leaves. For example, immersion in the environment supports the development of a relationship between the learner and the natural world giving activities purpose and meaning (Wellings, 2012), so that when a child interacts with, and experience their environment they start to assign meaning to people, places and objects which becomes knowledge (Vygotsky, 1978). The affordance or qualities of the landscape or outside environment and the type of opportunities it provides, as well as how the environment has been constructed and viewed by practitioners, is crucial in defining children's experiences (Heft,1988).

Whereas, Davis and Waite (2005) were concerned that different locations would produce different experiences and outcomes, making it difficult to compare like for like and specify physical features that are an essential part of Forest School. A chief concern is getting the balance right between how Forest School is interpreted and implemented by practitioners, while remaining flexible particularly in relation to what each individual site has to offer, maximising the potential of the natural environment (Figure 2.1). To better understand the outside learning environment, it is necessary to draw on literature outside of Forest School. Tovey (2010) a writer on outdoor education, suggests that the outside space should be full of opportunities and potential for freedom, creativity and experimentation, as opposed to one with fixed spaces, over full of equipment or as a response to a pre-existing plan. It is through open and dynamic spaces that children can move unrestricted and places become meaningful to the children and their play (Tovey, 2010). The interaction between children and the outside environment is expressed in Figure 2.1.

Part of the debate over what constitutes a 'typical' Forest School location is because it is not static but a dynamic living space (Knight, 2013). A further consideration identified by Waite and Davis (2007) and reiterated by Tovey (2010) is that outside play is very different to inside play. Using the outdoors should involve practitioners and children adapting to the environment, not the other way around (Tovey, 2010), while the space should take shape as children inhabit it, rather than a space regulated and controlled by adults. While the unpredictability and variability of the outside space is unique, when compared with the more familiar, static

enclosed indoor space it can generate in a lack of security for both children and adults (Tovey, 2010) potentially leading to the idea that playing outside is more risky than playing inside.

In an attempt to expand the options for Forest School, Knight (2012) suggested that locations other than a wood or forest could be used, justifying this move by explaining that Forest School is defined by rules rather than location. While this may have resulted in opening-up Forest School, particularly to inner-city schools with no wood nearby, as reported by Elliott (2015), it also caused some confusion, particularly as previous literature has maintained that ideally Forest School should happen in a woodland (Eastwood and Mitchell, 2003; Massey, 2002; Murray and O'Brien 2005; O'Brien and Murray, 2006; Wellings, 2012). Waite, Davis and Brown (2006) recognise that there may be more than one way of doing Forest School, and considering that Davis and Waite (2005) identified that the affordance of different sites could impact on outcomes, neglecting to do Forest School in a wood or at least with some trees would indicate a further step away from the original Danish philosophy being replicated. Variations in location and the unique, dynamic nature of each setting and what it affords can be embraced and interpreted to suit different circumstances by practitioners and children (Figure 2.1).

2.2.6.1.2 Child-initiated play

Knight (2009) alongside Eastwood and Mitchell (2003); Massey (2002); Murray and O'Brien (2005) and O'Brien and Murray (2006) maintain that child-initiated play is a defining principle of Forest School, although the balance between child-initiated and adult-led activities, and adult imposed boundaries and structured use of resources was identified by Davis and Waite (2005) and Davis, Waite and Brown (2006), results in a mismatch. Child-initiated play comes from children's innate motivation rather than adult imposed rules and controlled spaces (Jarvis, Brock and Brown, 2014). For children to be able to initiate play for themselves practitioners need to provide stimulating, playful environments and interesting resources so that children engage and initiate their own learning experiences (Pyle and Danniels, 2017), (Figure 2.1). Eastwood and Mitchell (2003) and Massey (2002) made a direct link between the model of Danish early years practice and Forest School being child-initiated. Stressing the individual nature of learning in Forest School child-initiated learning encourages children to discover for themselves at their own pace (Murray and O'Brien, 2005; O'Brien and Murray, 2006). While Wellings (2012) principles state that Forest School is a learner-centred pedagogical approach (Table 2.1). Subtly different a child-centred approach is based on developmentally appropriate

activities that are typically planned by practitioners as opposed to child-initiated play identified by Davis and Waite (2005) and Waite, Davis and Brown (2006). Maynard (2007a) warns that with an adult planned interpretation albeit child-centred, play may be over-managed which may be due to an over-emphasis on curriculum requirements. This dynamic between practitioner interpretation is represented in Figure 2.1.

Different kinds of spaces invite children to make their own connections and attachments, and provide opportunities for them to transform space for their own purposes, for example camps, dens and houses, sometimes with elements of fear such as a dark cave, which are unlikely to be planned for by adults (Tovey, 2010). Children also like to create their own special or secret spaces away from adults, where "these small secret worlds are calm, ordered and reassuringly secure" (Tovey, 2010, p.75). Intimate spaces also encourage social interactions and allow for privacy with gaps to see out, yet children remain concealed from view (Tovey, 2010). It is the act of occupying the space that is important, although control and ownership is only ever temporary (Tovey, 2010).

However there remains some difference between the rhetoric and reality of child-initiated play (Davis and Waite, 2005; Davis, Waite and Brown, 2006). While Knight's work has made a consistent and comprehensive case for Forest School making it accessible to a wider audience and contributing to its popularity, her contribution to the field led the way for others to produce 'how to' guides on Forest School. While at the same time the failure within the field to securely underpin the pedagogy of the approach, in particular relating to the discrepancies identified by Davis and Waite (2005) and Davis, Waite and Brown (2006), over the balance of child-initiated and practitioner planned activities increases the potential for practitioners to 'cherry pick' aspects of Forest School to suit, which could result in a loss of identity.

While Knight's work has made a consistent and comprehensive case for Forest School making it accessible to a wider audience and contributing to its popularity, her contribution to the field led the way for others to produce 'how to' guides on Forest School. At the same time the failure to securely underpin the pedagogy of the approach, possibly due to a lack of understanding of pedagogy as well as discrepancies over location and significant principles such as child-initiated activities have allowed practitioners to 'cherry pick' aspects of Forest School resulting in a loss of identity.

2.2.6.1.3 The practitioner

Although Knight (2009), Murray and O'Brien (2005), O'Brien and Murray (2006), and Wellings (2012) identify that Forest School training is desirable, Wellings (2012) goes further explaining the role of the practitioner (Table 2.1). Wellings (2012) details how the practitioner implements pedagogy through careful planning, uses observation to scaffold and tailor learning, and dialogue to build relationships with learners. How the practitioner understands Forest School pedagogy can vary according to a number of complex and interconnected factors and how each element is combined could result in different expressions of Forest School (Murray and O'Brien, 2005; O'Brien and Murray, 2006). While there may be more than one way of doing Forest School (Knight, 2009; Waite, Davis and Brown, 2006), the close relationship between practitioner's interpretation and implementation of Forest School, was seen to affect children's experiences (Maynard, 2007b) and represented by multi-directional arrows in figure 2.1). Further, and crucially how the practitioner understands, interprets and implements the key elements of Forest School could lead to a dilution of pedagogy, and variation in practice which in turn could affect outcomes (Davis and Waite, 2005; Maynard, 2007b).

The growth in commercialisation of training courses (Leather, 2018) has developed alongside a parallel growth of practical guides to Forest School. While training courses offer practical experiences and certification by a registered training provider, such as Archimedes Training (2012). Books such as those by Constable (2015, p.21) offer a cheaper and more immediate alternative but have an emphasis on "adult-initiated ideas" with clearly stated learning objectives, rather than child-initiated play. Examples include ready-made resources such as leaf identification sheets and worksheets for leaf rubbings, as well as resource lists that include paper, glue, rope, string, empty pots for collecting items. Rather than encouraging children to be resourceful and creative as they search for items they require in the natural environment (Knight, 2012; Murray and O'Brien, 2005; O'Brien and Murray, 2006; Tovey, 2010), the pre-selection of resources is a way of controlling and monitoring exposure to activities and resources by practitioners, which further limits the experience on offer (Tovey, 2010).

While offering an accessible and cheaper way to *do* Forest School, books only provide limited philosophical, pedagogical explanation and brief background information (Leather, 2018; Waite, Bolling and Bentsen, 2015). Consequently, their use by the untrained or inexperienced practitioner could result in a 'we use what works' attitude (Eaude, 2011, p.13). An over reliance

of teaching manuals could contribute in part to the tensions relating to different interpretations by practitioners, observed by Mackinder (2017); Maynard (2007a) and Waite Bolling and Bentsen, (2015). In the longer term, it is possible that the original idea of Forest School could be lost through practice that has been diluted through of lack of pedagogical understanding (Dillon et al., 2005).

2.2.6.1.3.1 The practitioner and risk

Within the main body of Forest School literature there is limited research that explicitly explores risk, apart from Waters and Begley (2007) who compare risk-taking behaviours in Forest School and a school outdoor play space. In other research (Murray and O'Brien, 2005; O'Brien and Murray, 2006; Maynard, 2007a, 2007d) aspects relating to risk are secondary findings. For example, Maynard (2007d) recognised how practitioners view and use the outside environment, particularly in relation to their perception of risk, alongside how they view the child shapes children's experiences. Consequently, the area of risk in relation to Forest School needs separate investigation especially for identifying the link between the adult's role and children's experiences (Figure 2.1).

Waite and Davis (2007) acknowledge that learning outside is different to learning inside. Higher adult child-ratios, as well as more time, space and freedom (Waite, Huggins and Wickett, 2014) can mean more opportunity for managed adventurous or risky activities (Knight, 2012; Murray and O'Brien, 2005; O'Brien and Murray, 2006), although learner initiated activity can also result in play that is unpredictable (Knight, 2013; Tovey, 2010). How practitioners view the outside environment and risk, as well their perception of the child, as able or needing protection, informs how they construct and utilise the outside environment, which in turn shapes children's experiences (Bilton, 2002).

While not directly researching risk Maynard (2007d) identified different attitudes towards risk among teachers and Forest School Leaders. Her study revealed the Forest School leaders positive view of risk-taking related closely to the view of the child as strong, and "capable of looking after themselves and of directing their own learning" (Maynard, 2007d, p.388) and constructed an environment that is "safe enough" (Knight, 2013, p.39) and uses the outside to challenge themselves and develop resilience (Maynard, 2007b; Wellings, 2012). Whereas teachers emphasised the negative aspects of risk they maintained control and authority over children who were weak and needed protection (Maynard, 2007d), a view attributed to a health and safety discourse by Waite, Huggins and Wickett (2014).

Viewing the child as unable to manage their own risk, can lead to unnatural management and in extreme cases over monitoring by adults in an attempt to eliminate risk (Gill, 2007), imposing a structure through a routine, framework or rules (Knight, 2009) creating an erosion of freedom and independence for children resulting in "over protected spaces", "sterile playgrounds" and "over regulated play settings" (Knight, 2013, p.39). Adults who are anxious about children taking risks particularly over concerns regarding accountability and their role (Tovey, 2007) may result in limited children's play based on their own perceptions of danger and their "own tolerance of risk" (Sandseter, 2009, p.3) resulting in "inflexible, predictable, stereotyped play" (Tovey 2007, p.59). All are counterproductive and limit the autonomy of the individual (Waite, Huggins, and Wickett, 2014). Consequently, the practitioner's role is crucial in ensuring children know how to experience risk safely (Knight, 2013; O'Brien and Murray, 2006).

An alternative discourse considers risk-taking as an "important element" of Forest School as exposure to risk through challenges offers children opportunities to gain confidence in their own abilities (Maynard, 2007b, p.326). Forest School offers learners the opportunity to take "supported risks appropriate to the environment and themselves" and "promote the holistic development" and develop resilience in those taking part (Wellings, 2012 n.d.). A positive approach to risk has to be carefully managed by the practitioner, primarily through observation, which is key in supporting practitioner's decisions over whether to intervene or not (Wellings, 2012). The practitioner should know how to support children in taking risks and challenging themselves providing a safe yet challenging environment (Knight, 2013).

The practitioner should be comfortable with children challenging themselves and *teaching* the children how to do this safely, while balancing play with appropriate challenge and risk in a controlled way (Knight, 2013; O'Brien and Murray, 2006) so they experience "freedom with safe boundaries" (Maynard, 2003, p.4), and benefit from positive experiences (Leather, 2013; Waite, Huggins and Wickett, 2014). Knight (2009) and Wellings (2012) suggest that training can support the practitioner in this role (Table 2.1). Knight (2013) and Maynard (2007a) identified the most effective way for practitioners to facilitate child-initiated and risky play was through scaffolding or supporting children. Observation as well as planning and developing a dialogue to build relationships are an important part of pedagogical practice (Davis, Waite and Brown, 2006; Wellings, 2012).

2.2.6.1.3.2 The practitioner and training

Leather (2018, p.12) posits that the growth in the commercialisation of training courses has established Forest School training as the "only acceptable badge and qualification to educate children in the woods", as Forest School can only be done by a 'trained leader' (Eastwood and Mitchell, 2003; Davis and Waite, 2005; Knight, 2009, 2013). This requirement could be an insurance or health and safety issue (Leather, 2018). The term leader is related to specific Forest School training up to BTEC Level 3 (Knight, 2013) and separate to early years training at BTEC level 2, 3 or degree (level 6). Although training for Forest School is not essential several studies (Maynard, 2007a; Mackinder, 2017; Waite, Davis, and Brown, 2006) have identified a difference in attitude, behaviours, interpretation and enactment of principles, between those who and have not been trained, suggesting that training provides knowledge and understanding of the pedagogical principles underlying Forest School (Maynard, 2007a; Cree, 2009).

Studies by Mackinder (2017); Maynard (2007d) and Waite, Davis, and Brown (2006) have shown that there can be a gap between how Forest School is put into practice and how Forest School leaders or practitioners interpret and enact the principles identified through planning, and organisation. Mackinder's (2017) case study revealed the untrained practitioner *planned with* the children, asking the children what they wanted to play with whereas the Forest School trained practitioner *planned for* the children's needs by preparing the outside space before the session, which allowed the children more freedom and time during the session (Mackinder, 2017), suggesting different boundaries were imposed by practitioners to control or manage behaviour and structure learning (Mackinder, 2017).

It is important to mention that other qualities and dispositions are also recognised as important such as experience, knowledge and understanding the outside space as a place for learning experiences, as well as being "outdoorsy" (Mackinder, 2017, p.185). A critical factor of Forest School is enjoyment and participation (Murray, 2003) and according to Murray and O'Brien, (2005); O'Brien and Murray (2006) and Knight (2009), is what sets it apart from other ways of learning outside. In addition, practitioners without training, prior knowledge and experience of outside activities could see Forest School as risky or dangerous (Tovey, 2007) as mentioned in earlier section on risk.

2.2.7 Summary

This section has explored the main features of Forest School and how they have developed in practice and identified through research over time. Starting with early exploratory studies. This literature review has presented a model of Forest School practice that reflects the elusive place of pedagogy at the centre that is not yet fully developed or clearly articulated. As apart from a limited mention of pedagogical principles by Waite, Davis and Brown (2006) and Wellings (2012) and brief mention of theoretical underpinning by Massey (2002) and Knight (2009), both are missing or poorly articulated in both literature and research. In addition, this review of the literature has also revealed three main areas including environment, the adult's role and the child's experience and position, that when combined interact to different degrees and result in Forest School. As a consequence of the unique nature of these interactions there are many possible an different interpretations of Forest School, that can vary depending on a range of factors including the physical features or affordance of a particular environment, how practitioners have constructed the learning environment, individual perceptions of risk and how the child chooses to engage and interact in the environment and with others. However, what is important is that there is a pedagogy of Forest School that underpins practice and sets Forest School apart from other ways of learning outside, while also ensuring that practice remains in essence, Forest School.

2.3 Forest Kindergarten

2.3.1 Introduction

Børnehave is a general term used in Denmark to refer to kindergarten or early childhood education and care childhood education and care (ECEC) settings for children aged 3-6 (OECD, 2000). The nearest practice to Forest School is *skøvbornehaven*, with *skøv* meaning forest. Therefore, the term Forest Kindergarten is used hereafter for this study. As brief historical context was set out earlier in the introduction, as the literature of Forest School and Forest Kindergarten are different in focus and format, this section is set out to reflect the dominant themes emerging from the Danish literature and is not a historic account.

2.3.2 Pedagogic Principles

Pedagogy refers to is a set of instructional techniques and strategies that enable learning to take place and usually learning in voles an interactive process between the teacher, the learner, and

the learning environment (Siraj-Blatchford et al., 2002). However, pedagogy can also be influenced by philosophical and theoretical thinking, and by social and governmental policy (Kelly et al., 2014; Wall, Litjens and Taguma, 2015). Siraj-Blatchford et al., (2002, p.27) suggest the term pedagogy is "defined quite broadly" and used differently in continental Europe, compared with the UK. The pedagogical principles of Danish early years provision have evolved out of a unique combination of social, cultural, and political values alongside theoretical ideas, that have shaped how the child is viewed, the best way to educate young children, and the how the pedagogue delivers this vision (Wall, Litjens and Taguma, 2015). In addition, pedagogy can be interpreted differently according to context for example in England pedagogy is closely associated to curriculum and involves an instructive approach (Siraj-Blatchford et al., 2002). Whereas in Scandinavia early years provision can be in direct opposition to practice that involves 'teaching' (Siraj-Blatchford et al., 2002). Although pedagogy is an established part of ECEC in Denmark, Jensen (2011, p.141) claims detailed explanation is elusive, as pedagogy is "taken for granted". As the values and beliefs embedded in Danish pedagogy are also accepted values in society, enshrined in law and form part of everyday practice, making them difficult to separate, see or talk about, as they are implied (Jensen, 2011).

In 2012, Williams- Siegfredson published a book in English, 'Understanding the Danish Forest School Approach', to explain what she and other lecturers from Bridgwater College experienced during their trip to Denmark in 1993. In a limited field writing about Denmark in English, Williams-Siegfredson (2012) is the only writer who has presented a detailed understanding of Forest Kindergarten. Based on her experiences she uses the book to recall her visits to the *skøvbornehave* and explains the pedagogic approach that inspired Forest School. Although anecdotal she provides much needed contextual information and theoretical underpinning, expressed as "seven pedagogic principles of practice" (Williams-Siegfredson, 2012, p.9).

The seven pedagogic principles include a holistic approach, that is based on a specific view of the child as unique and competent, and an active and interactive learner, who thrives in a child-centred environment, and initiates their own play (Williams-Siegfredson, 2102). Learning is based on real-life, first-hand experiences that offer autonomy, responsibility, and challenges. While creativity is used to foster well-being, as is giving children both mental and physical space and by allowing them time, which is important for the child to experiment and develop

independent thinking, as well as learning coming from social interaction (Williams-Siegfredson, 2102).

These pedagogical principles of Danish early years provision have evolved out of a unique combination of social, cultural, and political values. Alongside theoretical ideas, in combination they have influenced how the child is viewed, how the pedagogue delivers this vision or pedagogy as the best way to facilitate the development of young children, which have shaped how the learning environment is constructed.

2.3.2.1 The child

Kristjansson's (2006, p.18) study suggests that in Denmark early learning is "stronger and more pervasive" than other western countries, as it is that is child-centred and based on a child's interests. Therborn's (1993) comparative study of 21 countries, suggests this is because children's right to play among others are enshrined in law, and childhood is valued in its own right, where children are positioned as active agents with a voice. Within the democratic process they are assigned a considerable amount of choice and opportunity to express their opinion regarding their own lives (Sandseter, 2014). Although other countries have similar legal obligation to respect children's rights the *paedagogiske laereplaner* or pedagogical curriculum (MSA, 2014) goes further than most, as enshrined in legislation such as The Day Care Act (MSA, 2004; 2014), children have the right to play, choice and freedom (Sandseter, 2014). As a result children's rights filter through policy into practice as part of pedagogical principles which creates a strong and unified pedagogy that is enacted in practice and seen as child-initiated play and stimulating activities (Brostrom, 2006), and their opinions are sought on the facilities in a setting (Sandseter, 2014). A further consideration is the central premise that childhood is a unique period of time with intrinsic value, so "children should be allowed to be children for as long as they need to" (Kristjansson, 2006, p.21). As a result of this specific view of childhood and the child, the starting point for Forest Kindergarten is based on children's needs, and how and where they learn best (Jensen, 2011; Williams-Siegfredson, 2012).

2.3.2.1.1 Child-initiated play

The view of children as unique, competent, active, and interactive leaners aligns with specific theories relating to how children learn, such as those of Vygotsky (1978). Children are naturally

"observers and explorers" and it is through exploration and natural curiosity that they develop an understanding of themselves, others, and their environment through first-hand experiences (Williams-Siegfredson, 2012, p.24). Froebel identifies outdoor play as beneficial to child development in a holistic way (Joyce, 2012; Sandseter, 2014), as playing outside integrates learning through everyday activities (Jensen, Brostrom, and Hansen, 2010). Children learn best through child-initiated learning that is based on practical first-hand experiences "without conscious effort" in child-centred environments, outside (Williams-Siegfredson, 2012, p.25).

More recently Wood (2010) suggest the main features of child-initiated play are that they involve the child in choice, control ownership and autonomy through free play. When play is self-directed children have the capacity for great concentration when they have interesting things to do and are given freedom and time to achieve them, leading to feelings of competence and self-confidence (Vygotsky 1978; Williams-Siegfredson, 2012). Uninhibited free play allows children to make sense of their experiences and discover the joy of the natural space and learning (Williams-Siegfredson, 2012).

Children are active and interactive in their own learning (Williams-Siegfredson, 2012), with freedom and the right to choose what to play, where to play and who to play with (Sandseter, 2014). Play in the outside environment can be sparked by a personal interest or motivation to do something, usually relating to something seen or experienced. Additionally, as an active and interactive process play involves children thinking in order to develop their understanding (Vygotsky, 1978). Challenges arise naturally out of play and are to be overcome and solved, requiring children to try things out and test their ideas, constantly changing and adapting and thinking things through to develop understanding or problem solve. Success can help develop confidence and self-esteem, while being motivated to learn by, through and with the environment children engage in meaningful activity that constructs knowledge (Brostrom, 2006). The dominant view of the child as competent has informed the decision that outdoor play is the best way for young children to learn (Sandseter, 2014). Although the pedagogue does not teach or instruct, they play an important role in facilitating the process of children's active learning (Jensen, 2011; Williams-Siegfredson, 2012).

2.3.2.2 The pedagogue

In a Danish context there is a distinct difference between pedagogue and teacher (Wagner and Einarsdottir, 2006). The teacher *teaches* children through formal, whole group instruction in

school, whereas a pedagogue does "not teach anything" (Wagner, 2003, p.17). Both roles require the completion of a 3 ½ year BA undergraduate degree (Jensen, 2011) with a choice to specialise in the care and education of young children (Williams-Siegfredson, 2012). In Nordic countries formal instruction is seen as limiting rather than improving future outcomes for young children (Kristjansson, 2006). The pedagogue role is also used synonymously with care and specifically to refer to "early educators" (Jensen, Brostrom, Hansen, 2010, p.18).

Uncovering the nature of pedagogue's work and defining features of practice can be tricky. In part this is because of the dynamic role the pedagogue plays enacting pedagogy through the construction of the learning environment and providing conditions for learning in the natural environment, supporting play and child-initiated activity. In addition, there is a symbiotic nature to the relationship between the environment, the pedagogue, and the child, which is difficult to disentangle and isolate because of the pedagogical principles that inform it.

2.3.2.2.1 The pedagogue and care

Pedagogues acknowledge their own role in supporting child development and place an equal importance on everyday activities and play which form the core of Forest Kindergarten (Jensen, 2011). By engaging in an active, physical process of learning through play or tasks children develop an understanding of themselves, relationships with others, including developing "social skills and experience themselves as autonomous" (Gulløv, 2003, p.25). Vygotsky (1978) identifies that the social aspects of learning have an important part in the formation of knowledge.

Although there is a mixture of solitary and group activities in kindergarten, there is also a routine coming together to jointly experience everyday tasks such as eating, which gives them shared meaning, purpose, and value so that they become events or even rituals and strengthening the community (Jensen, 2011). Vygotsky (1978) views communal activities such as these central to making meaning, as a way of strengthening the community nature of learning and knowledge sharing. Further children's daily participation in routine but necessary activities such as toileting and sleeping, develops resourcefulness and independence in children so they become capable of living in society (Jensen, 2011). The pedagogical emphasis on children's needs and care (Jensen, Brostrom, Hansen, 2010) is also identified in Brostrom's (2003a, p.21) study that identifies 3 different but overlapping varieties of child-care, "need care",

"upbringing care" and "teaching or support care", each with a different emphasis to "fulfil children's needs, wishes and intentions" (Wagner and Einarsdottir, 2006, p.9).

Need care relates to a child's rights and responsibilities and the pedagogue sees the child as a person that needs boundaries necessary to protect their health and safety as they explore their world and express their autonomy (Brostrom, 2003b). *Upbringing care* is related to the professional's role in helping children to acquire normative standards, attitudes, and behaviours to function in a democracy (Brostrom, 2003b; Wagner and Einarsdottir, 2006). Lastly, *teaching or support care* relates to how the pedagogue supports children as they construct academic and social knowledge and skills (Brostrom, 2003b). These differences and the larger ideological shared values and understandings they represent are taken for granted in Nordic countries (Wagner and Einarsdottir, 2006), but integral in any attempt at understanding differences between Denmark and England.

2.3.2.2.2 The Pedagogue- a role model

As a role model, pedagogues provide an example for children to imitate. By being motivated and engaged in outdoor activities and demonstrating an inquisitiveness supporting an "interest in what they see and find" outside pedagogues encourage this in children (Williams-Siegfredson, 2012, p.18). The pedagogue works alongside children as an equal, with an emphasis on doing things together, and with a balance of equal power balance that creates shared meanings and develops a common ground, while they also need to be knowledgeable and able to show children how to find things out for themselves (Jensen, 2011). By displaying their emotions and showing how they are affected by other's actions, and then respecting others by giving space when needed, pedagogues are providing good examples for children to copy (Williams-Siegfredson, 2012).

2.3.2.2.3 The Pedagogue- Observation

The pedagogue's style of working with children is based on anti-authoritarian relationship, which emphasises children's own "choices and self-management" (Gulløv, 2003, p.34) and is "free from excessive control and supervision" (Wagner, 2006, p.292). Children are viewed as competent and responsible (Gulløv, 2003), so typically there is an equal power balance between pedagogues and children. With almost no schedule the pedagogical aim is for children to make

their own decisions, where they want to be and who with taking responsibility for their own actions (Gulløv, 2003).

Pedagogues actions move dynamically between leaving the child to play unobserved, being the observer or being a supporter or initiator of the play (Jensen, 2011). Knight (2013, p.7) refers to a Danish case study where pedagogues "observed, provided, [and] interacted but did not dictate". Through observation, the pedagogue can see the child's potential and capabilities, then knows how best to make experiences child-centred or relevant to individuals (Williams-Siegfredson, 2012). By careful observing, using their knowledge of the child and theoretical underpinning with sensitivity pedagogues can "step into an activity" or "step back from it" and allow children time to work things out for themselves (Williams-Siegfredson, 2012, p.37). However, Jensen (2011) argues that stepping back from the child, needs to be handled sensitively otherwise it could be interpreted as the pedagogue distancing themselves from the child and not have the desired effect. With pedagogues as coach and guide children they can achieve more (Williams-Siegfredson, 2012, p.37). Further, if an adult takes too much responsibility the child's own initiative, motive and interests may go unnoticed (Brostrom et al., 2012). Although children have a significant amount of freedom with opportunities to choose activity and "play what they like". Pedagogues make no attempt to persuade children to participate in or suggest educational outcomes of activities (Gulløv, 2003), although if necessary pedagogues can initiate other kinds of play, for example if the child repeats a "narrow range of play types" (Sandseter, 2014, p.115). As a result of the extended time spent in Forest Kindergarten pedagogues also plan long-term projects (Williams-Siegfredson, 2012).

2.3.2.2.4 The Pedagogue - Emotional development

Pedagogues support children as they begin to regulate their emotions and develop a sense of predictability, self-regulation, awareness of safety and responsiveness in their social environment (Williams-Siegfredson, 2012). Pedagogues work with affective and physical development as through affective feelings and an active interest in the child by the pedagogue is instrumental in creating human bonds and developing a secure attachment (Kristjansson, 2006). Through their relationship with the child, and the child's relationships with others, pedagogues talk to children about their feelings and find ways of dealing with and exploring their emotions, children develop social skills and "experience themselves as autonomous"

(Gulløv, 2003, p.25). Pedagogues promote children's learning holistically, understanding that emotion and cognition work together (Williams-Siegfredson, 2012).

2.3.2.2.5 The Pedagogue - Social development

In Denmark children are positioned as autonomous individuals, as well as an important part of the "collective" and all relationships are valued including the one with yourself (Jensen, 2011, p.155). Children's voice is strengthened by pedagogues who align early years provision with the political purpose of education for democracy (Jensen, Brostrom and Hansen, 2010). Pedagogues support children to participate in a responsive, egalitarian community in a meaningful manner, for example, by being encouraged to care for animals and plants (Wagner and Einarsdottir, 2006). Further taking on responsibilities help children to gain an understanding of democracy and develop their democratic role (Kristjansson, 2006; Williams-Siegfredson, 2012). Vygotsky (1978) suggests that it this through community and relationships that children experience joint decision making and make meaning.

Pedagogues acknowledge that friendships or child-child relationships have a big significance for social and emotional development. By having affective feelings and an active interest in the child, the pedagogue is instrumental in creating human bonds and developing a secure attachment (Kristjansson, 2006). There is a "strong ideal" that children have friends, which they "must be allowed to cultivate", and to develop "fellowship" and companionship, consequently relations between children are highly valued and encouraged by pedagogues (Jensen, 2011, p.154). Interaction with peers and peer play is viewed as developmentally and socially significant and "equal to or better than instruction from adults" (Kristjansson, 2006, p.21). For example, sometimes when children cannot complete a task by themselves, they seek the support of more capable peers with the less capable raising their game "in collaboration" (Brostrom, 1998, p.118).

Vygotsky (1978) posits that social situations and relationships are central to children learning about themselves, their place in the world, and their connection with others, supporting their meaning making and knowledge construction. As through these co-constructed experiences children learn to communicate their needs and master challenges in their world, children grow in self-confidence and social competence (Brostrom, 1998; Jordan, 2008; Williams-

Siegfredson, 2012). Children are fundamentally learning through play that is self-initiated (Williams-Siegfredson, 2012).

As Vygotsky (1978) suggests relationships are significant for learning as through them we can articulate and test our ideas on others. Brostrom et al's., (2012, p.118) Scandinavian research identified playing with other children as positive, and the main focus of kindergarten is creating children who are "socially competent", especially as children without friends could be "marginalised" (Jensen, 2011, p.155). Therefore, pedagogues "have an eye" for these important "child-child relationships or significant friendships", and support children to "be attentive to each other, register each other and help each other" and emphasise with others, (Jensen, 2011, p.155). As it is through social interactions that children begin to establish a culture and social world with their peers (Vygotsky, 1978; Williams-Siegfredson, 2012), as part of whole child development, and an active member who contributes to the community (Jensen, 2011).

2.3.2.3 Location and Environment

As the name suggests a Forest Kindergarten is located in or near a forest or a wooded area and offers a freer experience outside the city (Williams-Siegfredson, 2012). Consequently, children typically spend all day there (Gulløv, 2003; Jensen, 2011). Each setting uses what is unique to their location and build on the preferences of those involved so "no two are the same" (Williams-Siegfredson, 2012, p.63), (Section 1.4.4).

Kindergarten or a children's garden is Froebel's idea that children grow and develop best in a nurturing environment (Garrick, 2009). Froebel believed that for children to develop holistically it was important to create a community, linking health, care and education for children and families (Garrick, 2009). Although the Forest Kindergarten seen today were established in 1980's out of the need for more ECEC places, continuing the tradition of outdoor provision for young children (Sandseter, 2014), philosophy remains rooted in Froebel's idea of the health benefits of being outside (Williams-Siegfredson 2007; 2012). It is usual for young children to spend most of their time outside in all weathers, embracing and connecting with nature all year round (Sandseter, 2014).

2.3.2.3.1 The learning environment

The Day Care Act., (MSA, 2014) states that the pedagogue should provide a safe environment for children to thrive and develop. The pedagogue works to establish a framework of

possibilities through which children can experience activities and natural materials in both the physical and cultural environment that is child-centred (Williams-Siegfredson, 2012). A natural environment creates a specific set of circumstances conducive to play and learning (Sandseter, 2014) and children initiate their own play *in, with* and *through* the natural environment (Gulløv, 2003). However, it is the pedagogue's understanding and enactment of the social and pedagogic principles which can be seen in how they create the "conditions for learning situations" that shapes both children's experiences and how the child views themselves as individuals (Brostrom, et al., 2012, p.11). In addition, pedagogues work with children to create a physical and mental environment where children participate in everyday activities (Brostrom et al., 2012).

Being outside in nature as a starting point for children's learning is based on the romantic ideals of Rousseau and Froebel, while engaging with your environment is considered by Piaget as a starting point for learning (Joyce, 2012). The pedagogical argument for outdoor provision is that children gain knowledge and understanding from being close to nature, with the natural environment providing a springboard for children's natural curiosity, motivating them to explore and discover for themselves (Vygotsky, 1978). Being outside there is easy access to natural materials, which further appeals to children's creativity and imagination (Jensen, 2011). Most Forest Kindergartens have animals such as chickens, goats, pigs, rabbits, and features such as fruit trees and vegetable beds, which the pedagogues and children look after together (Gulløv, 2003). Learning to take responsibility and care for living things (Williams-Siegfredson, 2012) affirms a connection with nature (Gulløv, 2003) and helps develop a "personal and collective responsibility" (Williams-Siegfredson, 2012, p.17). Children construct their understanding and knowledge of the world outside, in a healthy and natural environment with a pedagogue to guide them (Vygotsky, 1978).

The pedagogical principles where children thrive as active and interactive learners, in child-centred environments, that Williams- Siegfredson (2012) puts forward as the dominant style adopted in kindergarten, are underpinned theoretically by Vygotsky (1978). Using the outdoors as an environment for children to play and learn is not new and has been inspired by theorists including Froebel, Piaget and Vygotsky. The pedagogue uses the "child's needs and perspectives" as a starting point and then jointly creates an environment that holistically meets those needs, with the child as an active participant in the process (Jensen, Brostrom and Hansen, 2010, p.19). The active element of kindergarten and the co-construction of the

environment and learning, where the child has time to develop a relationship with the environment alongside other children encourages thinking and learning (Vygotsky, 1978; William-Siegfredson, 2012).

2.3.2.3.2 Risk

As already established, pedagogues view the child as strong and capable, with the freedom to make own choices. In an outdoor environment where investigation and exploration are encouraged, especially when children initiate their own play, children will inevitably be exposed to challenges that pose some risk (Williams-Siegfredson, 2012). Risk is considered pedagogically as an inevitable part of childhood and necessary for child development (Gill, 2007).

By being exposed to risk in a positive and supported way children can experience appropriate challenges so they can learn about themselves. When children operate in an environment that provides complexity and challenge, they are more likely to take the initiative respond to the challenge and acquire skills and concepts reflected in the pedagogue's role and children's experiences (Gill, 2007). Exposure to risk by challenging oneself is an accepted part of childhood and considered essential to children's development, for example self-regulation (Williams-Siegfredson, 2012). As children who play in natural environments undertake more diverse, creative, and imaginative play (Fjørtoft, 2004).

Therefore in Forest Kindergarten risk and challenge are viewed as powerful tools for personal growth, building self-esteem and confidence through individual and group situations that develop trust, leadership, and judgement as part of taking care of oneself and others (Williams-Siegfredson, 2012). With risk and challenge a central part of Forest Kindergarten, children are guided by pedagogues to be aware of different risks and dangers, and to assess a situation for themselves (Gill, 2007), as they encounter challenges, and overcome difficulties, alongside caring adults who make them feel secure, and encourage and enjoy their emerging interests and skills (Williams-Siegfredson, 2012).

2.3.2.3.3 Time

Although ECEC is not statutory, 97 per cent of 3-5 year olds attend some day-care provision (OECD., 2000) with most children spending "between 5 and 11 hours" in day-care (Gulløv,

2003, p.24). While children who attend Forest Kindergarten can typically spend between 5 to 7 hours outdoors (Borge, Nordhagen and Lie, 2003). Attending Forest Kindergarten all day, Children have large blocks of open-ended, uninterrupted play, which allows children plenty of time to explore, play and revisit favourite places (Williams-Siegfredson, 2012) and become more absorbed in their activities and assimilate information (Brostrom et al's., 2012).

In an active learning environment such as Forest Kindergarten it is important that children have the time to play, try things out, make mistakes and consolidate their ideas, explore and experiment with their ideas and knowledge, as suggested by Vygotsky (1978). This requires time. In addition, Brostrom et al., (2012) discovered that when children are allowed to play for extended periods of time they are more likely to be absorbed in their play, return to it later, complete it and build on it if they choose. Consequently, children should have the possibility to save their constructions and materials so they can return to them. As Forest Kindergarten is all day, every day, children can return again and again to favourite places, reliving their previous experiences, and comparing today with yesterday, asking questions and discussing with pedagogues and their peers (Williams-Siegfredson, 2012). Provision of large amounts of open-ended play time, alongside the opportunity to share their ideas about their world and experiences with each other and adults through dialogue suggested by Vygotsky (1978), can encourage children to develop their own play preferences (Williams-Siegfredson, 2012).

2.3.3 Summary of Forest Kindergarten

This section has established that Forest Kindergarten is an approach to ECEC that happens daily, outside. The explanation of seven pedagogic principles set out by Williams-Siegfredson (2012) are useful to understand Danish values and how they are embedded in pedagogy. Pedagogical principles are at the heart of Danish Forest Kindergarten and consequently are placed at the centre of a relational model (Figure 2.2). Central to the pedagogical principles lies the dynamic and interactive process between the teacher, the learner, and the environment (Gage, 1985) and represented in figure 2.2. Although "taken for granted" the theoretical underpinning and pedagogical principles are at the heart of Forest Kindergarten (Jensen, 2011, p.141) and placed at the centre of figure 2.2. The dynamic and interactive process between adult, child and environment identified in the literature is represented by two-way arrows between all three components in figure 2.2.
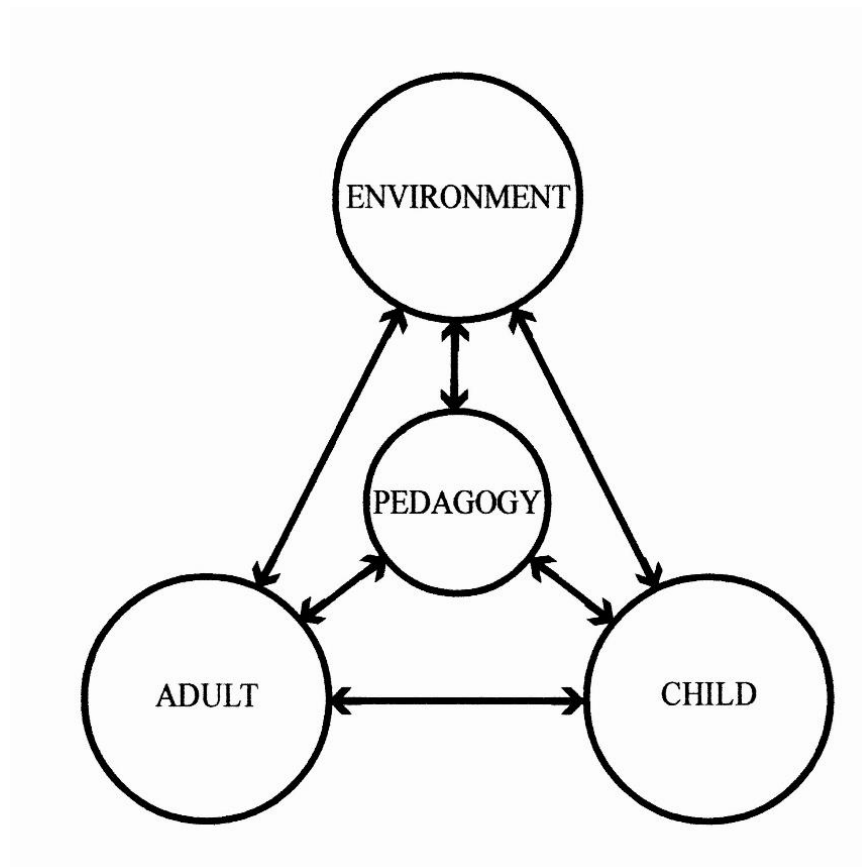
Figure 2.2. The relationship between the environment, child, pedagogue and pedagogy in Forest Kindergarten.

All three component parts (adult, child, environment) are interconnected and closely linked to social, cultural, and political values present across Denmark and in Danish early years provision. Socially and culturally the child is perceived as an active and interactive learner who can make their own decisions, whilst it is socially accepted that young children learn best outside where they can explore in the natural environment at their own pace. The outside environment is a springboard for children's natural curiosity which can be seen in figure 2.2 by the arrows going from pedagogy, between the adult, the child, and the environment.

Children create their own play as situations naturally emerge out of the environment, where through the pedagogical approach adopted by pedagogues (Figure 2.2) children set their own challenges engage with nature and develop as sense of self, others, and place. While pedagogical principles are highly influential and at the heart of practice and consequently in the centre of figure 2.2, children are also active in their own lives. Represented by the dynamic arrows in figure 2.2, children choose to interact *in*, *with* and *through* the environment, which is significant for their own construction of knowledge and learning. The pedagogue, as the arrows

show in figure 2.2 is instrumental in enacting the pedagogical principles, as well as accepting children's rights and freedom to choose and so interact with the child accordingly. Also central to provision is the affordance of the outside space and natural environment, whether it is near to a forest or woodland. Further the pedagogue jointly constructs the learning environment with the child, illustrated in figure 2.2 through the two-way arrows.

It is the pedagogue's role to construct favourable conditions that support this vision of education for young children (Brostrom et al., 2012), where they can "flourish, grow and develop positive self-esteem" (Williams-Siegfredson, 2012, p.19), without too much supervision or control from adults (Wagner and Einarsdottir, 2006). Minimal input, intervention or supervision from pedagogues results in play that is child-initiated, with ample uninterrupted time and space for children to explore. Distance from pedagogues also opens-up opportunities for children to interact socially with their peers, combine their ideas, impressions, intuitions and experiences as they form ideas about their world and share them with one another and develop friendships (Jensen, 2011).

2.4 A conceptual framework of Forest Learning

A review of the literature from Forest School and Forest Kindergarten has been synthesised to identify the similarities and differences between the two approaches and used to produce the diagram (Figure 2.3). Whilst there are links made to pedagogy in both literatures and demonstrated in figure 2.1 and figure 2.2, the dynamic relationship between the three elements (adult, child, and environment), and with pedagogy is more apparent in Forest Kindergarten and demonstrated by the two-way arrows in figure 2.2.

Figure 2.3. The common element and differences between Forest School and Forest Kindergarten.

ADULT

FOREST SCHOOL	BOTH	FOREST KINDERGARTEN
Forest School Leader Teacher Early Years Practitioner	Trained	Pedagogue
Regular, weekly session	Long term process Routine Familiar	All day everyday Usual practice Time to continue and return
Plans, lead activities	Constructs learning environment	Creates conditions for experiences
Provides resources, toys, play props and equipment		Equipment and tools available
Structure and tight boundaries		Loose structure
Manages risk, protects 'safe enough'	Scaffolds Observes	Support risk taking and encourages setting personal challenges
		Risk normalised and accepted
		Without excessive supervision
		Encourage and support children to form friendships Children can teach each other better than adults
Alternative approach	Compatible with curriculum (6 areas)	Established practice
	EYFS and DCA	Pedagogical principals part of DCA

CHILD

FOREST SCHOOL	BOTH	FOREST KINDERGARTEN
Nursery Children aged 3-4 years		Kindergarten Children aged 3-6 years
Both child-initiated play and adult planned activities	Play	Child-initiated play Life skills experiences
	child-centred	
Encourages child to be independent while also needing protection	child-initiated	
	spontaneous	
Use senses to explore	exploration discovery learning	
Inexperienced	freedom capable holistic	
Use resources provided by adults	Resources found naturally	Resources found when needed and adapted creatively for own play
	Social	Friendships
		Community
		Relationships

(cont'd) Figure 2.3. The common element and differences between Forest School and Forest Kindergarten.

FOREST SCHOOL	BOTH	FOREST KINDERGARTEN
Trees	Outside	Forest
preferably woods	natural environment provides resources	creates conditions for play
context for learning	leads learning	Spring board *in*, *with* and *through*
	motivates children's natural curiosity and	
different locations lead to different experiences and different outcomes	inspires children's play	no two are the same
'safe enough'	elements of risk and danger	provides appropriate, individual challenges
unpredictable		

ENVIRONMENT (left) · ENVIRONMENT (right)

In Forest School (shown in figure 2.1) even though pedagogy is at the centre there is limited interaction shown by no inter-relational arrows, there is an interaction between the three component parts, adult, the child, and the environment. Using the three components, adult, child, and environment identified from the literature the centre column of figure 2.3 shows the overlapping areas of commonality between the two approaches, whilst the outer sections identify the main differences. Although closely connected within each approach there are significant differences in how the adult, child and environment are interpreted and enacted, these are explored next.

2.4.1 Similarities and differences

Literature from both Forest School and Forest Kindergarten supports that learning should be child-centred and child-initiated, facilitated through play that is based on exploration and discovery (Eastwood and Mitchell. 2003; Massey, 2002; Williams-Siegfredson, 2012). In addition, early Forest School studies saw child-initiated play and activities (Eastwood and Mitchell, 2003; Massey, 2002), whereas later studies found less evidence of child-initiated activity and play with a move towards adult-led, planned activities (Davis and Waite, 2005;

Waite and Davis, 2007; Waite Davis and Brown, 2006). Even though in Forest Kindergarten pedagogues plan for projects these are long-term and made possible because of the high amount of time spent outside (Williams-Siegfredson, 2012).

However, there were clear differences identified in how the child is viewed or constructed. In Forest Kindergarten pedagogues view the child as capable and therefore able to initiate and direct their own learning. In Forest School, Forest School leaders adopted a similar approach (Maynard, 2007a) whilst Waite and Davis (20007) study showed that early years practitioners are more likely to view the child as unable to initiate their own play or activities. The inconsistency identified in Forest School research and practice can be linked to the different expectations of adults, manifesting through the imposition of structure to protect children and keep them safe, and identified as over-managed play (Maynard, 2007b). In part, this difference is attributed to differences in training, although more research is needed to investigate this claim.

Although both approaches recognise scaffolding as a suitable adult approach, within Forest School literature there is limited empirical evidence and sound theoretical underpinning to support this claim. Whilst in Forest Kindergarten Williams-Siegfredson (2012) makes clear mention of the theoretical underpinning of pedagogical approaches. Observation is used in both approaches, with pedagogues in Forest Kindergarten using observation to minimise the need for intervention (Wagner, 2006), whereas in Forest School, how observation is used is only mentioned briefly by (Davis, Waite and Brown, 2006; Wellings, 2012), who associate it with planning, dialogue and building relationship and the practitioners' supportive role. In both Forest School and Forest Kindergarten the adult creates the conditions for child-initiated learning.

England and Denmark both have early years curricula, and although expressed differently each relate to the same 6 areas of child development. However, the flexibility to practice Forest Kindergarten or Forest School is different within each respective curriculum document. Danish Forest Kindergarten is an established practice and its pedagogy sits alongside the curricular and state requirements. Whereas, Forest School in England is an alternative approach to early years practice and is less established. Although Forest School ideas are separate to those in the EYFS they are compatible (Knight, 2009).

Both Forest Kindergarten and Forest School are a long-term process (Knight, 2009; O'Brien and Murray, 2005; Murray and O'Brien, 2006; Wellings, 2012; Williams-Siegfredson, 2012). However, Forest Kindergarten happens every day (Williams-Siegfredson, 2012), whereas Forest School is typically a weekly session. O'Brien and Murray (2005) and Murray and O'Brien (2006) identified differences over what was understood by regular for example fortnightly, whole day, morning or afternoon sessions that happen weekly for 6-weeks, or longer, although Wellings (2012) suggests that it should be regular enough so the environment remains familiar. It is worthwhile to add that the difference noted in frequency and time spent outside, could affect any outcomes and benefits identified, particularly if a comparison is made between both approaches. Especially significant is the length of time spent in Forest Kindergarten as it allows children to take their time work at their own pace and return to play and repeat favourite activities (Williams-Siegfredson, 2012). Currently, there is no evidence of this opportunity in Forest School research.

Although in Forest School there is much written about the benefits of personal and social development this is in relation to self-esteem and confidence building (Swarbrick, Eastwood Tutton, 2004). Whereas, in Forest Kindergarten the emphasis is on developing relationships and forming friendships, which engenders a sense of community where care and empathy towards others are important (Jensen, 2011). Pedagogues actively support the development of this. In Forest Kindergarten children learn to support each other through friendship and peer support, learning to rely less on pedagogues for help, reflected in the pedagogue's minimal supervision and facilitatory role.

Studies show that Forest School and Forest Kindergarten happen outside, in natural environments. While Forest Kindergarten always happens in a wood or a forest, the setting for Forest School is disputed, with disagreement developing over where Forest School happens a more recent concern. Knight's (2009) broad interpretation opened-up where Forest School could take place, suggesting it could happen anywhere that was special or different. While Eastwood and Mitchell (2003); Massey (2002) and Waite, Davis and Brown (2006) agree and that Forest School happens in a wooded area. In Forest Kindergarten, the environment plays a role in stimulating learning, with the pedagogue creating the conditions for learning *through* the environment and using a scaffolding role, whereas in Forest School early research identified spontaneous, child-initiated play, whilst more recent studies show adult-led and planned activities (Davis and Waite, 2005; Waite, Davis and Brown, 2006), with little detail on how the physical or learning environment is constructed. Ideally the environment should motivate

children to learn and capture their imaginations enabled through a play-based pedagogy (Tovey, 2010).

All three elements of child, adult and environment are closely connected. For example, how adults understand and enact either Forest School or Forest Kindergarten is closely related to how they view the environment and the child, but also affect the environment and the child. For example, in Forest Kindergarten the pedagogue views risk as positive and relates risk taking to problem solving, challenge and personal development. Viewing the environment as risky could be connected to the shift from child-initiated towards adult-led activity, a difference also identified here as in Forest School where the practitioners impose tight boundaries and structure (Murray and O'Brien, 2005; O'Brien and Murray, 2006), with the practitioner protecting children and removing any potential hazards, as opposed to the minimal supervision, and positive view of risk identified in Forest Kindergarten (Wagner and Einarsdottir, 2006).

2.5 Theoretical Framework

2.5.1 Introduction

This section looks at the theoretical ideas relevant to this study. Constructivism as a socio-cultural paradigm is the main theoretical perspective, including the concepts of Zone of Proximal Development, scaffolding, co-construction and intersubjectivity. In addition, pedagogy of play and its main features including stages of play, structured play, child-centred play, child-initiated play, and free play are explored.

2.5.2 Constructivism

Constructivist theory explains how humans construct knowledge and meaning from their experiences (Olusoga, 2014). Rather than just through biological maturation, individuals learn and develop through the process of acquiring new information. While information can be passively received, the main principle of constructivist theory stresses that understanding requires engagement and learners build new knowledge by making meaningful connections with prior knowledge. Through interactions with the environment, humans construct their own mental model of the world, as it is by discovery, experimentation, and exploration that

knowledge and meaning are formed (Vygotsky, 1978). Knowledge and learning are constructed through purposeful activity that reflects the complex reality of the world, such as problem solving and experimentation through authentic tasks which contextualises rather than abstracts information. The effort required results in learning that is an active not passive process, with knowledge constructed rather than being innate, transmitted or passively absorbed (Olusoga, 2014). Consequently, constructivist theory and in particular Vygotskian and post-Vygotskian research on play has "serious implications for today's early childhood pedagogy and a direct application to early years education" (Bodrova and Leong, 2011, p.70). Although constructivism focuses on cognitive development such as the work of Piaget, given the social context of this work, this thesis is emphasising the socio-cultural constructivism developed by Vygotsky and later by Bruner.

2.5.2.1 A socio-cultural perspective of play

Vygotsky (1978) recognised that children learn and develop through real-life experiences and exploration, constructing new knowledge through activity. Viewing learning as a social activity, he claimed that it is through social interaction, or the development of relationships and activity with others that the child learns and develops. Therefore, the quality of children's social and cultural relationships is important, alongside the role adults and peers play in supporting learning (Vygotsky, 1978).

2.5.2.2 Language and communication

Vygotsky's (1978) socio-cultural perspective acknowledged language as a significant part of social processes and cultural contexts, and central to the development of relationships. Therefore, language and communication are of significance to the learning process in two ways. Firstly, language as inner speech or internal dialogue is a way of individuals processing information and thoughts, and key to the learning process and cognition or internalisation. Then, in communicating and sharing their understanding and ideas with others in social contexts children can inform others, while also testing out their knowledge and inviting a response (Broadhead, 2004; Vygotsky, 1978; Wood, 1998).

Consequently, Vygotsky (1978) identified learning as a communal activity, with the community playing a central role in the process of making meaning, and the construction of

the environment in which children grow up, influencing how children think and what they think about (Wood and Attfield, 2005). Communication used in joint interactions and negotiations as part of a decision making or problem-solving process further supports the development of language (Vygotsky, 1978). It is through social activities and interactions, the learner gradually internalises the external and develops mature mental activity, while adults or more able others bring their knowledge, perspectives, and beliefs to educate others (Bruner, 1986). Language is used to support the development of others leading to the notion of the Zone of Proximal Development (ZPD).

2.5.2.3 The Zone of Proximal Development

Vygotsky (1978) used the term Zone of Proximal Development (ZPD) to refer to the potential gap between assisted and unassisted development. The ZPD is a space between what the learner can do on their own and what they can potentially do with help from a more able other. The more able other, either adult or peer, can support learning through their interactions, and enable the learner to function at a higher level than when on their own. Vygotsky (1978) states that cognitive development stems from social interactions, communication, and supported or guided learning within the ZPD, as children and their partner's co-construct knowledge. Thus, all teaching and learning is a matter of sharing and negotiating socially constituted knowledge, which indicates an equal balance of power.

One of the ways Vygotsky's work differs to that of Piaget is the consideration he gave to the role of the adult or more able other in supporting the learner through the ZPD (Broadhead, 2004). When supporting the learner in the ZPD the more able other is required to simultaneously plan ahead, and also recognise the significance of the here and now on a child's development and progress (Broadhead, 2004). However, possibly arising out of translation issues there is disagreement over the part played by the more able other. For example, Vygotsky's use of the term 'instructor' implies a didactic role with the adult in charge of what happens in the ZPD, contrary to his central tenet of an equal power share (Daniels, 2001). More recent translations suggest the term 'educator' which infers a more equal power balance and corresponding approach, that better matches Vygotsky's ideal. Consequently, Olusoga (2014) suggests that Vygotsky only provides limited information on the adult's role in the process of supporting the learner in the ZPD, which needed to be addressed.

2.5.2.4 Scaffolding

Bruner (1976, p.24) built on Vygotsky's ideas to explain how the adult or more able other can scaffold learning, using the ZPD so the learner can engage with higher mental processes "until such time as the learner is able to master his own action through his own consciousness and control". Scaffolding is part of a crucial process whereby the adult enables the learner "to internalise external knowledge and convert it into a tool for conscious control" and achieve mastery (Bruner, 1976, p.24).

However, as we have already seen in the role of an instructor or educator in the ZPD, the exact role of the adult in this process can vary in relation to the different power balance of power between the learner and the more able other (Olusoga, 2014). Similarly, scaffolding is characterised by Wood and Attfield (2005, p.94) as a specific pattern of interactions with the adult in a

> one to one relationship in which the teacher expert or more knowledgeable other remains in control of what is to be learned and how the teaching will be carried out - essentially a transmission model.

This model involves an asymmetric power balance between the teacher and the learner based on what the "experts provide for novices" (Rogoff, 1998 p.698). Stone (1993) criticises the scaffolding process for being too mechanical, however Chi (1996) suggests that the more able other performs the critical task of tailoring the experience, task or knowledge, through support such as modelling, coaching, guidance, prompting, or simplification, albeit with a specific outcome in mind (Jordan, 2008).

Having established that the role of the more able other is central, how adults utilise play to mediate and scaffold learning and development need to be explored. Jordan (2008, p. 34) identifies distinct "scaffolding interactions" that relate to a predetermined goal related outcome. These include questioning that focuses on specific knowledge outcomes, noticing small achievements and giving the child feedback on predetermined skills, modelling specific skills that and structuring problem solving and experimentation to reach a particular outcome, and lastly, telling children specific facts but in the context of an adult decided learning agenda. Jordan (2008) interprets these scaffolding interactions as typically one-way, or a limited two-way process of idea sharing, resulting in limited shared meaning. To reinforces the variation between different interactions Jordan's (2008, p.49-50) research distinguishes between "scaffolding learning *for* children and co-constructing learning *with* children".

2.5.2.5 Co-construction

At the centre of Vygotsky's (1978) view is that knowledge and learning is constructed via joint activity and social interaction with others. He suggested that the mental processes that underpin an individual's knowledge, skills and understanding are mediated or co-constructed through interactions the learner has with the knowledge, skills and understanding that are held by the adults and more experienced peers with whom they engage in joint activities (Olusoga, 2014). In this interpretation the more experienced other does not dominate the learning process but supports the learner as they negotiate a pathway through the activity as a co-construction (Olusoga, 2014).

The term co-construction emphasises the child as a powerful player in his/her learning, with adults and children working together to make sense of the world and developing meaning rather than just acquiring facts (Jordan, 2008). Co-construction requires the adult and learner to establish a symmetrical balance of power, and the focus moves away from the transmission of knowledge and skills by the adult as instructor to achieve a goal they have identified in the ZPD, towards the interests and motivations of the learner, as suggested by Vygotsky (1978). As this is a reciprocal relationship the child's expertise is valued and the adult needs to become aware of how the child thinks, knows, and understands, as well as having good dialogue skills (Jordan, 2008). Still within the ZPD the learner has access to the knowledge, skills, and understandings of the more able other, which can be mediated for optimum use and development, making use of higher ability.

Jordan (2008, p.49) sets out examples of interactions for "constructing learning *with* children", which she categorises as process-oriented activities. For example, using questioning techniques with no particular outcome in the adult's head, and hearing children, which means listening and not interrupting, while also allowing silences. Getting to know the children really well, so that they know children's preferences and interests, and what children think, allows the adult to follow the child's lead, make links and revisit the children's ideas and interests (Jordan, 2008). This develops a two-way intersubjectivity including sharing their own ideas with the children to extend their current interest through in depth projects, and with permission entering children's fantasy play (Jordan, 2008). In addition, valuing and giving voice to children's activities for example, respectfully asking if the child would like the assistance offered.

Although Jordan (2008) also identified features common to both scaffolding and co-constructing interactions such as maintaining warm and trusting relationships and encouraging children to work with each other, in co-constructing learning the role of the adult or more

experienced other is to establish joint problem solving and intersubjectivity, which seems to be the main difference between scaffolding learning. While the co-constructing mode of learning is more empowering for children and they engaged in higher order thinking through their involvement than when adults scaffolded their learning (Jordan, 2008).

2.5.2.5.1 Intersubjectivity

Central to co-construction, is the idea of intersubjectivity. Intersubjectivity is created when shared meanings are jointly constructed through interactions, usually in social and cultural contexts with individuals who have a shared understanding of the situation. This shared cognition and consensus is essential in shaping our ideas, enabled through the communal use of language. Berk and Wisler (1995, p.27-8) suggest that

> Intersubjectivity creates a common ground for communication as each partner adjusts to the perspective of the other… constantly striving for a shared view of the situation- one that falls within the child's ZPD.

Intersubjectivity requires the adult to adopt a collaborative, listening and open approach to the learner and the activity. Through co-construction the leaner has an opportunity to be a "powerful player in their own learning" (Jordan, 2008, p.42). In co-construction the learner can be "proactive in identifying and seeking sources of support" (Wood and Attfield, 2005, p.104). It also requires children and adults to makes sense of the world, interpreting and understanding activities and observations as they interact with one another and their environment (Jordan, 2008). Co-constructing raises the status and role of the leaner as they construct their own learning alongside the other, whereas in scaffolding the adult leads the learning giving them a higher status. Intersubjectivity requires the adult to use a collaborative approach and a listening style that is open to the learner and their involvement in the activity and learning process. However, Jordan (2008) suggests that there are interactions common to both scaffolding and co-constructing and adult who has access to the full range of skills can move flexibly between those of scaffolding and those of co-constructed learning.

Vygotsky (1978) explains learning as making connections between existing understanding and new knowledge, constructed through meaningful activity and social interactions. He also posits that language and communication form the foundation of learning, as it is through language that children develop inner thought and outward expression of ideas, negotiate, and solve problems (Vygotsky, 1978). In young children learning can be mediated by playing with others, so a play-based pedagogy that centres on the development of relationships between participants is ideal for Forest School and Forest Kindergarten.

Although advocating discovery learning and play (Knight, 2009), Forest School is managed by adults (Waite and Davis, 2007) who adopt interactions that are typically a one-way or limited two-way process that scaffold *for* children's learning (Jordan, 2008). Using the ZPD, a more able other can bridge the gap between unassisted and assisted learning, and to encourage children out of their "comfort zone" (Massey, 2002, p5). In Forest School the adult was identified as a leader or instructor who models or simplifies experiences and activities that relate to a specific learning outcome based on curriculum targets (Maynard, 2007; Waite and Davis, 2007). In addition, Early Forest School research by Massey (2002) and Eastwood and Mitchell (2003) suggested that adults engaged in joint activities with children. Similar behaviour is also identified by Williams-Siegfredson (2012) in Forest Kindergarten.

Within Forest School, adult interactions are reportedly a mixture of scaffolding *for* learning and co-constructing *with* children, whereas literature suggests that in Forest Kindergarten the dominant interactions are co-constructed but based on intersubjectivity. Although featuring strongly in Forest Kindergarten research to date has not investigated intersubjectivity in Forest School. Learning in Forest Kindergarten is mainly play based and social interactions between children form the foundations of learning (Brostrom, 1998; Kristjansson, 2006; Jensen, 2011). Adult interactions are based on intersubjectivity and include a common ground, where shared meanings and co-constructed understandings can be formed. Seen in Forest Kindergarten by Williams-Siegfredson (2012), the adult adopts a collaborative, listening and open approach to the learner and the activity where the player has influence over their own learning that is intersubjectivity (Jordan, 2008).

Intersubjectivity requires the adult to be in collaboration with the child, using a listening style that is open to the learner and their involvement in the activity and the learning process (Williams-Siegfredson, 2012). However, Jordan (2008) posits that there are interactions common to both scaffolding and co-constructing, and the adult who has access to the full range of skills can move flexibly between those of scaffolding and those of co-constructed learning. Waite, Davis and Brown's (2006) research, although not using a constructivist lens, suggested

that co-construction may happen in Forest School, it did not conclude it was the dominant approach. Overall, the difference identified between adult and child interactions in Forest School compared with those of Forest Kindergarten seem more related to intersubjectivity, where interactions are associated with developing shared meanings and understanding that are typically driven by play.

Co-constructing learning requires the more experienced other to support the learner as they negotiate a way through the activity but does not dominate the process as in scaffolding (Olusoga, 2014). Learning is motivated by the learner, activity and play are process orientated rather than outcome driven while the adult follows the child's lead and control is shared, positioning the child as a powerful player in his or her learning (Brostrom, 2006). Typical interactions include maintaining warm and trusting relationships and encouraging children to work with each other (Jordan, 2008) also identified in Forest Kindergarten by Williams-Siegfredson (2012). The main difference between scaffolding and co-constructed learning relates to the role of the adult or more experienced other to establish joint problem solving and intersubjectivity (Jordan, 2008). While academics such as Leather (2012) and Knight (2018) have used a constructivist lens to theorise about Forest School, to date there has been no empirical research that has looked at Forest School through a constructivist lens. How adults interpret pedagogy to construct Forest Learning, through their relationship between children and the environment, and especially how children's play is scaffolded or co-constructed by adults is of interest to this study. A deeper understanding of the pedagogy of play is examined next.

2.5.3 Play

Play is a complex concept and an umbrella term (Bruce, 1991), with many characteristics that involve different activities, thus making it difficult to categorise and define (Else, 2009; Pyle and Danniels, 2017; Wood and Attfield, 2005). Consistently revealing the variability of play, research into play has explored different kinds of play, play behaviours and environments (Sutton-Smith, 2001). How play is conceptualised by researchers can vary according to different lenses applied, their view of play and the specific aspect being explored (Wood, 2009). For example, there are many terms used to refer to play, such as free play, child-initiated play, and play based learning, while Hughes (2012) claims that there are 12 kinds of play including exploratory play, fantasy play, imaginative play, mastery play, social play, indicating that there

is no universal definition of play (Reed and Brown, 2000). The characteristics and different kinds of play are explored here in more detail.

2.5.3.1 Play from a socio-cultural perspective

Vygotsky (1978 p.101) identified the importance of play claiming that "play is not the predominant feature of childhood, but it is a leading factor in development" and learning. He calls play a "leading activity" as "in play a child behaves beyond his average age… as though he were a head taller than himself" and it is through play that the child moves forward developmentally and develops their ZPD (Vygotsky, 1978, p.102). Identified as the "bedrock of early learning" by the British Educational Research Association (BERA), Early Years Special Interest Group (2003, p14), play allows children to learn at the highest level (EYFS, DSCF., 2008).

2.5.3.2 Characteristics of play

Building on the theoretical ideas of Vygotsky, Bruce (1991; 2005) and Moyles (2010) among others have explored the characteristics of play, and although a taxonomy of play is useful, within this complex area there is an inevitable overlap across categories of play. One of the overriding characteristics is that play should be playful, fun, and enjoyable (Meckley, 2002; Vygotsky,1978) and have positive effects on the players (Moyles, 2010). Part of the enjoyment comes from play that is personally and intrinsically motivated (Pellegrini, 1991; Saracho, 1991). While play that is self-initiated (Moyles, 2010) involves children deeply as they have chosen it rather than been made to do it by adults (Bruce, 1991; Meckley, 2002). As a result, children make their own meaning and control the activity themselves (Pellegrini, 1991; Saracho, 1991).

2.5.3.2.1 Active process

With the emphasis on doing, the active process of play is important (Meckley, 2002). Play that is driven by children's interests, actions and behaviour is spontaneous (Pellegrini, 1991; Saracho, 1991). Rather than being goal or outcome driven, the play context is open-ended (Moyles, 2010), and any goals are self-imposed (Pellegrini, 1991; Saracho, 1991). When playing everything is possible, and reality can be discarded so imagination can take over (Moyles, 2010). Highly creative and flexible, the player has a sense of decision making,

ownership and control over the play (Bruce, 1991; Moyles, 2010). When time is available children can become deeply involved in the flow of free play as they are not easily distracted, allowing for the complexity and challenge to develop (Wood, 2009). Bite size pieces of information and experience can build on previous learning, which can then be applied in a safe environment (Bruce, 1991).

Interestingly, Vygotsky (1978) points out that it is through free play that children develop their ZPD, self-control and self-regulation. When children are free to explore on their own terms, reorganising and taking control of the outcome they take on fantasy roles that represent social reality (Vygotsky, 1978). By rehearsing, repeating and mirroring behaviour children can learn about social norms and practice social behaviours, which in part is supported by the development of rules, which Vygotsky (1978) argues is a main characteristic of play.

2.5.3.2.2 Rules

Play should be free from externally imposed rules (Moyles, 2010; Vygotsky, 1978), as it is the imposition of rules by adults that makes play educational or 'work' (Wood, 2013). Not agreed in advance but created alongside the play the rules emerge from the play situation, and are followed, adapted, and developed by the players (Pellegrini, 1991; Saracho, 1991). Further the rules set the boundaries of the activity and parameters of the play within the child's control (Bruce, 1991). It is through self-governed play where the children are formulating their own rules that children demonstrate the most self-control and begin to develop restraint, as they manage their feelings and self-regulate (Vygotsky, 1978). In addition, Vygotsky (1978, p. 96) claims that how rules are used indicates an evolution of children's play with the development from games with an overt imaginary situation and covert rules to games with overt rules and a covert imaginary situation.

2.5.3.2.3 Roles and props

In play, the constraints of reality are suspended (Vygotsky, 1978) and children can take on roles and pretend as though the activity were real (Meckley, 2002). Some roles are about the management of the play, while others involve imaginary situations that are sometimes based on prior experience. The use of props in play is open-ended (Bruce, 1991). Sometimes children use toys that have a specific use for a particular purpose such as a telephone. At other times

children improvise with found items and material or use toys for a different purpose. The flexible and symbolic use of props encourages imaginative solutions and creativity to further enhance the play giving deeper meaning, for example using a stick to represent a horse (Bruce, 1991; Jarvis, Brock and Brown, 2014; Vygotsky, 1978).

2.5.3.2.4 Stages of social play

In play, children can choose to play alone, in groups or have the adult as a co-player or refer to them for help (Wood, 2010). Parten's (1932) now classic study of children's social stages of play set out 6 stages that relate to a child's age and stage of development. From birth to 2 babies demonstrate features of onlooker play where they watch others but do not attempt to join in, before developing solitary play. In solitary play children play alone and do not get close or interact with other children. However, solitary play is not inferior to group play but necessary for children to be able to reflect without any pressure from others (Bruce, 1991; Vygotsky, 1978). When playing with others, they might play alongside or parallel enjoying the company but not interacting directly. In this stage, as they mirror and imitate other peers, they are showing an awareness of what others are doing while also developing independence (Bruce, 1991).

Between 2 ½ and 3 ½ years children start to play alongside others, or parallel play (Parten, 1932). They are building on the skills they have learned about how to play but are not yet ready to play *with* other children. As children start to form social relationships at around 3 to 4 ½ years, they exhibit features of associative play where they start to share materials and begin to follow their own play story. Parten (1932) posits that the highest level of social play is co-operative play where from the age of 5 years children begin to play in groups and work together to achieve a common goal. Children play co-operatively with other children as they gain competency they manage in larger groups (Bruce, 1991; Parten, 1932). A requirement of co-operative play is the joint agreement over the theme of the play, for example shops and have a shared play story (Bruce, 1991). Children who frequently play together they know each other well and can tune in to other's thoughts and feelings. The free flow of play helps children co-ordinate their learning (Bruce, 1991). Co-operative play features negotiation between children and children change roles, take turns, and make suggestions about the play story as it develops. Bateson (1955) used the idea of children having play texts or play narratives that are imaginary stories drawn from on their experiences created to explain their play actions. Children operate on two levels, first in the scenes they are acting out or rehearsing, while still maintaining their

position in the real world (Bateson, 1955). Children can switch between the two positions, moving between their make believe role then as disagreements arise come out to resolve them, then back into role and continue with the play, which indicates that children are learning about themselves and others on a social level through the social play context (Garvey, 1977; 1990).

Parten (1932) suggests then at about 6 years old game play evolves, and starts to involve external, rigid, or standardised rules, and the ability to play by externally imposed rules requires self-control and an understanding of how society works. However, Vygotsky (1978) suggests that play where children make their own rules is more advanced as it reveals the social systems of their culture. In addition, development of rules by the players indicates an amount of negotiation and co-construction of the rules as they set the parameters of their play (Jordan, 2008). Through social situations such as play, children demonstrate an understanding of their own boundaries, which develops self-regulation as they construct a shared meaning (Jordan, 2008; Vygotsky, 1978).

Although the characteristics of play are varied and complex, there are many positive benefits including social interaction, especially where play is process rather than outcome orientated. The different developmental stages of children's play from onlooker play to cooperative play with rules, both internal and externally imposed, shows how play progresses. What needs further clarification is the different types of play, such as free play, child-initiated or adult-initiated or play based learning.

2.5.3.3 Types of play

Although there is no agreed, universal definition of play (Reed and Brown, 2000), the previous section has provided a synthesis of the main characteristics (Bruce, 1991). In addition, the varied nature of research into play has resulted in different conceptualisations from a range of perspectives resulting in subcategories or different kinds of play. Although these sub-categories maintain the central features of play, some elements have been dis-guarded or emphasised, resulting in different conceptualisations of play and related terms, such as child-centred play, child-initiated play, and play based learning. The features of these are explored next.

2.5.3.3.1 Child-centred play

Within early years there is no universal agreement over what child-centred means (Chung and Walsh, 2000; Siraj-Blatchford and Sylva, 2004) with Chung and Walsh (2000) identifying over

40 different meanings based on children's interests to their participation in decision making. A child-centred approach is closely associated with Froebel who suggested a developmentally appropriate, active approach to learning through play that was tailored to the interests of the child (Jarvis, Brock and Brown, 2014 p.17). Later, Plowden influenced by Piaget's theory of developmental and cognitive constructivism, adopted the term child-centred (mentioned earlier) places the child and their needs at the centre of the provision, and play is prioritised alongside discovery learning (Garrick, 2009). Since then the term child-centred has been associated with an idealised interpretation of play and early learning (Anning, 1998). This was furthered in the 1990's when the term was appropriated by media to imply an inadequate, unfocused use of educational theories (Fleer, 2003). In Forest School literature Massey (2002) and Eastwood and Mitchell (2003) use the term child-initiated although at the time, this view based on Frobelian principles could have been a romanticised interpretation.

2.5.3.3.2 Free play

Possessing the characteristics of play, although with a stronger emphasis on some aspects, free play is posited by Vygotsky (1978) as central to children's social development. Bruce (1991) and Moyles (2010) expand on Vygotsky's (1978) conceptualisation to identify common elements including actions and behaviours of free play as a process where there is no end-product. The main characteristics of free play incorporate those of play mentioned above with emphasis on freedom, choice and rules that emerge from the play and not imposed by adults (Pellegrini, 1991; Saracho, 1991). In addition, a key factor of free play is that there is "little direct intervention" from adults, and consequently no pressure for outcomes (Wood, 2010, p.20). Therefore, play that is pure or free should be child invented (Meckley, 2002) or child-initiated where the children demonstrate choice, control and imagination rather than adult-initiated as play that is "freely chosen" is the closest to "pure play" (Wood, 2010, p.20). While the use of props, as well as the inclusion of time so that children can become deeply involved in their play as well as develop relationships with others and a sense of self. Vygotsky (1978) points out that it is through free play that children develop their ZPD, self-control and self-regulation.

2.5.3.3.3 Child-initiated or adult-directed play

Although play is used in early years documents for example "learning through planned purposeful play" in the EYFS (DfES, 2007, p.11), the association of play as being" planned

and purposeful" conflates play with work and results in a conflicting use of terminology (Moyles, 2010). Curriculum guidance such as EYFS (DSCF., 2008) emphasise learning through play, suggesting pedagogy is underpinned by well-planned experiences based on children's spontaneous play (indoors and outdoors); time allowed for children to become absorbed in their play; engagement with other children and adults. The common principles include a balance of adult-directed and child-initiated activities that includes free and structured play (Siraj-Blatchford and Sylva, 2004; Wood, 2009). As mentioned earlier the imposition of rules by adults makes the play educational (Wood, 2013), and Wood (2013, p.4) furthers that the kind of play that is put forward in policy documents is clearly related to an educational agenda with educational outcomes which she terms "educational play'.

Bennett, Wood and Rogers (1997) and Wood (2010) suggest that in the early years provision there is a tension between the rhetoric and reality of play. Rather than a dichotomous categorisation of play that is either child-initiated or adult-initiated and free or structured, Pellegrini (1991) suggests a continuum of play from pure play to non-play. Similarly, Wood (2010, p.21) suggests there are two different pedagogical orientations, represented by two zones. One zone is characterised by free play and child-initiated activities, while the second zone corresponds to adult-initiated work or "non-play" with space in between. Within each zone there are "contrasting but complimentary" forms of involvement for adults and children as they dynamically move in, out and between the zones (Wood, 2010, p.21).

Within in the structured "non-play" zone, adult-directed activities engage children in playful ways with work activities based on curriculum content and tightly controlled by adults use of instructional strategies, allowing the children limited control and choice (Wood, 2010). Practitioners may use their observations of child-initiated play to inform their planning of activities. Practitioners who generate a dichotomy between 'work' and 'play' are more likely to provide adult-initiated activities and play activities that reflect adult plans and purposes (Wood, 2010). In addition, practitioners struggle to constrain and manage the unpredictability of free play and instead engineer and manage children's play choices, activities and behaviours that promote educational outcomes (Kushner, 2007).

Within the child-initiated zone play and activities are freely chosen and are the closet to "pure play" as it meets most, if not all of the play the criteria mentioned earlier. For example, the players have freedom to choose with no pressure on the outcome or product and so set their own goals or outcomes, without intervention from adults (Wood, 2010). Intrinsic motivation is valuable because it results in child-initiated play (Jarvis, Brock and Brown, 2014, p.17). However, educators need to provide stimulating, playful environments and interesting

resources so that children engage and initiate their own learning experiences through play (Pyle and Danniels, 2017). Where children were engaged in their own interests, teachers found that they had to understand the meaning of children's play, and identify their patterns of learning, rather than how they relate to predetermined learning outcomes (Wood, 2009). Wood and Attfield (1996; 2005) children demonstrate a higher level of verbal communication, creative thinking imagination and problem solving through play, as play is highly motivating and enables young children to self-direct their learning while also encouraging concentration and high levels of engagement (Riley, 2003).

Within the zones children may choose work or play activities such as a game with rules or work like activities such as reading a book, and move between along a play work "continuum of play-based learning" rather than a work play dichotomy (Pyle and Danniels, 2017, p.274). Within the two spaces of adult-directed activities and child-initiated play there are many spaces in between with different degrees of pure or free play or work activities.

2.5.3.4 A pedagogy of play

Although play is a complex and tricky concept to define its value for development and learning is articulated by Vygotsky (1978). As seen in research play can be viewed from many perspectives and therefore defined in various ways, firstly by key characteristics, such as it is enjoyable, process based and intrinsically motivated. Then the developmental stages of social play, from onlooker and solitary play to cop-operative group play. Lastly different types of play that include free play, child-centred, child-initiated, adult-initiated play, and play-based learning.

Whether play is free or structured into work activities depends on the different philosophical perspectives and pedagogical positioning of the adult involved. For example, how far play is planned and linked to curriculum outcomes compared with the amount of freedom children have to set their own agenda, make their own rules and determine their own outcomes, influences the type of play or play-based learning children experience. In addition, whether the adult instructs, scaffolds, or chooses to co-construct with children using intersubjectivity contributes to children's experiences.

Given the different definitions of play explored here it is understandable that a pedagogy of play is elusive (Else, 2009; Pyle and Danniels, 2017; Wood and Attfield, 2005), as pedagogy involves the principles, theoretical underpinning and practice involved in the provision of children's learning experiences. The BERA working party concluded similarly that a

"pedagogy of play is less articulated… and not underpinned by systematic empirical research" (2013, p.14). As argued here, play means different things, to different people depending on the purpose and context. In addition, for ideological reasons the link between play and pedagogy is tricky, especially concerning the idea of free play and free choice (Wood, 2009). So, although there is considerable evidence of *learning* through play, there is less research on teaching through play and effective pedagogy of play should include opportunities for co-construction between children and adults in child-initiated and adult-initiated activities as well as free-play (Wood, 2009). Using Pyle and Danniels (2017) model of a continuum of play-based learning, that moves between child-initiated pure play and adult-initiated work activities allows for a more dynamic interpretation of play that could be applied to Forest School.

2.6 Conclusion

Although the two approaches may have similar theoretical or philosophical underpinning for example Froebel in Denmark and England, McMillan in England and Key in Denmark they no longer are the same approach, as even with some of the same elements there are differences in interpretation and enactment. While "excellent practice in one country can be inspirational to others" (Waite, Bolling and Bentsen, 2015, p.19) over time the different distinct political and educational systems have caused a possible erosion of the original idea, as it has adapted and changed, and now become its own approach, with an individual 'pedagogy'.

To understand, identify patterns and make connections between the phenomenon of Forest School and Forest Kindergarten, literature from the two fields has been compared. The component parts of environment or location, adult, and child were identified as important in both Forest School and Forest Kindergarten literature, and central to pedagogy, so have been used to structure figure 2.3. However, the interpretation of each component part, how they relate to each other and their relationship with pedagogy remains unclear, leading to this study's hypothesis and the three research questions. The main aspects relating exclusively to Forest School or Forest Kindergarten are set out separately, while the areas common to both literatures have been synthesised and presented in the 'overlapping' central section of figure 2.3. The synthesis of literature, alongside the construction of figure 2.3, has made clear the mutual aspects of Forest School and Forest Kindergarten. In addition to figure 2.1 and 2.2, figure 2.3 clarified that the place, interpretation, and significance of pedagogy within each phenomenon

is different and has further led to the formulation of the research questions pertaining to this study. In addition, the three main themes or component parts set out in Figure 2.3 are used in later analysis and discussion of data as a conceptual framework, to provide a focus and structure for comparison between previous research and data collected for this study.

What has emerged from the two strands of literature is that Forest School seems to be about an approach to learning outside, which is difficult to define, possibly because of a lack of research or theoretical underpinning which has caused many different interpretations and variations, in part because it is still evolving. Whereas in Denmark, learning outside is more culturally embedded there is a long tradition of young children learning outside Forest Kindergarten there is a more established approach. Forest School as it is currently translated in England seems to have lost some of its Danish-ness as it appears to have adapted over time to suit the different social and contextual climate in England. Although alluded to but not investigated in prior literature a constructivist lens is an appropriate approach to use to better understand Forest learning, and the relationship between the adult, the child, and the environment. Consequently, this study sets out to understand more about the practice and process of each approach through a constructivist theoretical framework alongside a pedagogy of play, by investigating adult's perceptions, and children's experiences of Forest learning in each environment.

Chapter 3 - Research Methodology

3.1 Introduction

This chapter sets out the aim of this study and the methodological decisions made throughout. First, I clarify the ontological and epistemological interpretivist assumptions relating to this project. Next, I explain why a case study methodology was adopted for this study including its main characteristics. Then I set out and justify the design decisions made relating to methods selected and ethical considerations. The last section includes an explanation of the analytical framework used to makes sense of data.

3.2 The focus and aim of the study

This thesis sets out to explore how Forest School is understood and put into practice by adults and experienced by young children. The literature review explained that the phenomenon of Forest School is an English interpretation of Danish Forest Kindergarten (Williams-Siegfredson, 2012), although there is a lack of clarity over definition. Translation may have resulted in some features being understood differently or even adapted (Leather, 2018). To understand more about the development, practice and process of Forest School in England and its relationship with Forest Kindergarten in Denmark this thesis sets out to explore children's and adults' experiences and interpretations of Forest School in both contexts.

Reminder of the research questions:

RQ1: How do adults interpret and enact a pedagogy of Forest School in England and Forest Kindergarten in Denmark?

RQ2: How do children experience pedagogy in Forest School in England or Forest Kindergarten in Denmark?

RQ3: What are the similarities and differences between Forest School and Forest Kindergarten environments and how do these impact on the experiences of their users?

3.3 Ontology and Epistemology

While there are many different approaches to research, each is supported by assumptions about the world and the kind of knowledge that is possible. The nature of how we perceive reality (ontology) is closely associated to any claim to knowledge (epistemology), or what can be known and how we know it. Ontology and epistemology are closely linked and inform methodology (Wood and Smith, 2016).

A subjectivist ontology suggests that we create our own realities, that they are evolving and shifting as societies change hence claims made to social knowledge are culturally and temporally bounded and context specific (Wood and Smith, 2016). How social knowledge is understood is also viewed as something which evolves, changes and specific to different cultures and individual experiences (Guba and Lincoln, 1994). Hence a subjectivist ontology is closely related to a social constructivist or interpretivist paradigm where humans create their own realities and knowledge that is multiple and shifting according to time and place, rather than uncovering one single truth (Cresswell, 2009).

This study is interested in gaining a detailed contextual knowledge and understanding of the complex social situation or the subjective reality of each case (Bassey, 1999; Braun and Clarke, 2013; Guba and Lincoln, 1994). The most appropriate way of looking in depth at the unique characteristics and social processes of two cases was achieved through the perspectives of the main agents involved and is more suited to using qualitative data and an interpretivist approach (Wood and Smith, 2016). Within Forest School research case studies have been used extensively to reveal a rich picture of each case, (Mackinder 2017; Maynard, 2007a) and also an in depth understanding of multiple cases such as Davis and Waite, (2005); Murray and O'Brien (2005) and O'Brien and Murray (2006). Although a direct comparison of children's experiences across two countries is rare (Kelly et al., 2014), the approach has been used by Langsted (1994) to gain young children's perspectives across five Nordic countries.

3.4 Research methodology- Case Study

Case study is characterised by the use of a specific 'case' as an example of something of interest (Merriam, 1988). For example, the case could be a person, a school, a class, an activity, a group, a programme, policy or phenomenon (Bassey, 1999; Simons, 2013). Case study uses a range of methods to carry out a comprehensive, contextual examination of an issue or seeks to explore and understand how and why something happened or developed (Simons, 2013; Thomas,

2016). The most popular definitions are provided by Merriam (1988), Stake (1995) and Yin (1994). The case should be clearly defined or bounded, it should include collecting a "variety of data" from a "variety of sources" using a "variety of research methods" (Denscombe, 2010, p.54). to provide an insight into the real-life circumstance of the case (Bassey, 1999). In addition, the case should be clearly defined or bounded. Although flexible the many ways of doing a case study can result in lack of definition. Yin (1994) suggest a case study should have a clear framework that incorporates the main characteristics, while also being guided by philosophical foundations or ontological and epistemological assumptions. How these principles have been applied to this study are demonstrate in Table 3.1.

Characteristics of case study	Forest School	Forest Kindergarten
Exploratory case study Typical data sample Bounded Holistic Real-life example	Ladybird class England Forest School site Data collected over 5 sessions	Guldsmed or Dragonfly class Denmark Forest Kindergarten site Data collected over 5 days
Multiple perspectives Multiple methods	2 Adults and 3 children Interview, observation, photo tours	

Table 3.1. Shows how the characteristics of case study apply to this study.

3.4.1 Features of case study

3.4.1.1 Boundedness

The selection of each case depends on the purpose of the study, what it is an example of and how it helps explain the issue or subject being investigated. For example, cases can be selected because they are special or unusual in some way, if there is a problem that needs resolving or

they are a "typical" example of an issue to be explored (Denscombe, 2010, p.57). The case study needs to be a "self-contained entity", with "distinct boundaries" that is defined spatially and temporally (Denscombe, 2010, p.56). Bounding the case involves defining what is and is not to be studied, so that the study does not look beyond the case.

This study is bounded by the two individual cases. Using definitions from each body of literature, each sample case has been selected as being representative of a class who participate in Forest School or Forest Kindergarten in each context (Table 3.1). The project is further bounded by the time spent collecting data, the geographical location of each case and equal number of participants from each case (Table 3.2).

3.4.1.2 Multiple perspectives and methods

A main characteristic of case study design is the use of multiple methods to collect data using different tools, from multiple perspectives (Hammersley and Atkinson, 2007; Yin, 1994). Insights achieved from different sources can provide different angles and perspectives on the complex processes being studied (Bassey, 1999). Further it can reveal something of how the relationships and social dynamics are understood and experienced by the participants at that time (Harrison et al., 2017).

In case study selection of methods is not restricted, and Yin (1994) suggests six kinds of evidence, documentation, archival records, interviews, direct observations, participant observation and physical artefacts. However, qualitative methods such as interview and observation are preferred as they offer a way to capture individual and complex interpretations of the context (Stake, 1995) and combine to form a detailed picture of each case (Thomas, 2016). However, without setting parameters observation and interview can generate a lot of data (Stake, 1995), which can be time consuming to analyse and interpret effectively and limit the effectiveness of the study. One way to manage large quantities of data is to bound the case further by limiting the number of observations and interviews carried out (Stake, 1995).

A range of data collected using different tools from multiple participants offers different perspectives and voices adding to the trustworthiness of the data. To maintain the authenticity of the case the researcher needs to be sensitive to the different voices present and how they are represented in the report (Vandenbroeck and Bie, 2006). Throughout the research process it was important to maintain authenticity regarding data collected from all participants, while trying not to let any one voice dominate, and as far as possible present an honest and reliable

representation of the data (Brinkmann and Kvale, 2015). Consideration was given to the transactional nature of knowledge and power symmetry between adult and children, participants, and researcher, particularly regarding the dominant voices (Brinkmann and Kvale, 2015). This is covered in more depth in the section on ethical practice and consideration of voice (Section 3.5.5).

3.4.1.3 Real-life

Case study is concerned with real-life situations and social phenomenon (Bassey, 1999; Yin 1994), rather than creating experimental conditions (Miles and Huberman, 1994). Understanding the complexity of social situations of both cases is crucial to identify how and why something happens or has developed a certain way (Stake, 1995) and open-up insights into the circumstances of each case in England and Denmark (Denscombe, 2010; Stake, 1995).

However, it can be tricky to capture and report real-life situations in detail potentially limiting the reliability of the study (Simons, 2013). Particularly when a subjectivist ontology and interpretivist epistemology recognise that there are multiple realities, meanings and understandings, and that knowledge is contextually and temporally bound (Graubaum, 2007). As a comparative study, this research looks at two similar cases, in different contexts, making a direct comparison difficult to achieve. It was only by studying each case in-depth, to gain knowledge of the authenticity of each case that it was possible to identify the distinct features relating to a specific case. Then by looking across the two cases for areas of similarity and comparison could be made.

3.4.1.4 Not generalisable

A case study is able to capture the complexity of a phenomenon or example of an issue, that a more superficial study might not (Stake, 1995), as it is only by studying each case in-depth that it is possible to begin to understand the nature of each individual case and complexity (Simons, 2009; Stake, 1995). Studying a particular case in detail, has the potential to reveal "insights of universal significance" which implies a degree of generalisation (Simons, 2013, p.20). Bassey (1999); Stake (1995); and Yin (1994), agree that the portrayal of a single instance locked in time and circumstance, as an "instance in action" (MacDonald and Walker, 1975, p.2, cited in Simons, 2013, p.20), where findings are case specific, makes them a poor basis for

generalisation. Bassey (1999, p. 51) warns of the "fuzzy generalisations" made in research lacking in certainty, suggesting that it is the "context and circumstance" that give the research meaning. Typically, findings from a case study are a representative example of other similar cases, studied in detail, that can offer a new insight, making them transferrable to other like cases (Denscombe, 2010; Simons, 2013), and is the case for this study.

3.4.2 Focus of case study

Depending on the purpose of the project, the kind of questions being asked, and the philosophical positions of the researcher, different approaches can be applied. For example, an "exploratory study" defines questions and hypothesises about a selected case, whereas an explanatory study attempts to explain what causes the effects of a chosen phenomenon (Yin, 1994, p.22). A descriptive study "describes" an event or experience within a given context (Yin, 1994, p.15), and a unique, critical, or revelatory case reveals something relating specifically to the chosen case (Stake, 1995), whereas, a representative or typical case is used because it is 'most like the rest' (Denscombe, 2010, p.57). Therefore, the focus of the study determines the approach used, and should be carefully selected (Stake, 1995; Yin, 1994). This study is interested in finding out more about the two cases of Forest School. Even though a study of two cases of Forest School could be explanatory or descriptive, the most appropriate way is to carry out an "exploratory" study (Yin, 1994, p.22) to compare through two "typical" cases and therefore most likely to be generalisable (Denscombe, 2010, p. 57). By asking How? and then Why? an exploratory case study provides an insight into a complex human situation (Yin, 1994 p.16), such as that of Forest School.

3.4.3 Case study design

To simplify the choice of case study design Yin (1994, p.13) provides a matrix based on the "logic of the design" (Figure 3.1). He suggests there are 4 basic designs depending on whether it is a single or multiple case study, with either single or multiple units of analysis. A single case with a single unit of analysis is a single holistic design or Type 1, whereas a single case with more than one unit of analysis is a single embedded design or Type 2 (Figure 3.1). A

multiple case design involves more than one case. Multiple case with a single unit of analysis is a Type 3 or a holistic, multiple case, whereas multiple cases with more than one unit of analysis is a Type 4 or a "multiple embedded case design" (Yin, 1994, p.39). This project looks at two cases and is a multiple case study.

	Single Case Designs	Multiple Case Designs
Holistic (Single Unit of Analysis)	TYPE 1	TYPE 3
Embedded (Multiple Units of Analysis)	TYPE 2	TYPE 4

Figure 3.1. The basic types of design for case study (Yin, 1994, p.39).

As each case is a complete unit of analysis, this study is a holistic design or Type 3. Rather than attempting to evaluate the merits of each approach (Yin, 1994), each typical case was explored separately to provide an insight into the "singular, the particular and the unique" circumstances of each example (Simons, 2013, p.3). Typicality was determined by each class exhibiting the main characteristics provided in the literature, for example frequency of session, and use of the outside environment. Each case also claims what they do is Forest School or Forest Kindergarten.

Given that using multiple methods is a characteristic of case study there are unlimited combinations that can be used (Stake, 1995). However, to make a credible case and ensure consistency the methods chosen should be part of a structured approach (Thomas, 2016; Yin, 1994). Although data collection and analysis for each case is carried out separately, it is replicated as closely as possible for each parallel case (Yin, 1994). Within each case the same

units of analysis were used, for example, the adult participants, child participants, the site and planning, and were all analysed in the same way. Then to ensure that evidence was gathered using the same tools (observation, interview and photo tours) over a sequence of five sessions in each case, the procedure was set out in a data collection schedule (Table 3.2), (Yin, 1994). Field notes were made in a research journal (Appendix 9) to record the context and conditions of data collection to refer to later.

	Forest School Ladybird class (case) 5 visits over 5 weeks (sessions) Reflective Journal	Forest Kindergarten Dragonfly class (case) 5 visits over 1 week (days) Reflective Journal
Visit 1	Walking interview and tour of the setting (audio recorded) Field notes / reflective journal	Walking interview and tour of the setting (audio recorded) Field notes / reflective journal
Visit 2	Photo Tour Practitioner 1 Photo Tour and Elicitation Interview child 1	Photo Tour Pedagogue 1 Photo Tour and Elicitation Interview child 1
Visit 3	Photo Tour and Elicitation Interview child 2 Photo Tour and Elicitation Interview child 3	Photo Tour and Elicitation Interview child 2 Photo Tour and Elicitation Interview child 3
Visit 4	Observation of child 1 Observation of child 2 Observation of child 3	Observation of child 1 Observation of child 2 Observation of child 3
Visit 5	Observation of Practitioner activity (Practitioner 2) Field notes Semi-structured Interview Practitioner 1 (with elicitation of photos)	Observations of Pedagogue activity (Pedagogue 2) Field notes Semi-structured Interview Pedagogue 1 (with elicitation of photos)

Table 3.2. Data collection schedule.

3.4.3.1 Sampling 'the case'

Using the literature, it was possible to define a representative or typical Forest School and Forest Kindergarten in each context (Denscombe, 2010). The three specific requirements were that Forest School was a weekly session, and Forest Kindergarten took place daily, both in outside locations with trees or a wooded area, and the children attending were aged between 3 and 4 years. To locate the cases, I initially searched on the Forest School Association (FSA) website for early years settings in England who had registered as Forest School providers with FSA training. I contacted three settings who were geographically near to me, via e-mail (Denscombe, 2010; Simons, 2013), explained my study and asked them to contact me if they were interested in participating. Of the two that expressed an interest, I carried out a pilot study in one (Section 3.4.3.3) and the other case is presented here. Locating a Danish site was more difficult as I had no local knowledge or contacts. Fortunately, through a contact at a Danish university an outside Forest Kindergarten just outside Copenhagen agreed to participate. Formal contact was made to each setting asking for agreement of participate in the study (Appendix 2 and 3). Participation in the study was based on the willingness of each class, adults, and children to participate in the study, meaning that data collected would be based on a convenience sample (Denscombe, 2010; Simons, 2013).

The study is bounded by using one case or class (Table 3.1) and from each context who take part in Forest School or Forest Kindergarten as a "typical" example (Denscombe, 2010, p.57). To reveal the distinctiveness of each, as stated in the aims and focus of the study (Stake, 1995), the study was bounded by the physical, geographical location of each case where the study took place, as one was in Denmark and the other in England. In addition, the study focused on each Forest School or Forest Kindergarten site. Travel to Denmark also meant that there was a limited time frame for data collection that could not be extended and temporally bounded the study. A data collection schedule (Table 3.2) was used to keep data collection on track and to ensure that data was collected consistently across the two cases (Yin, 1994). Keeping to the schedule of five visits was necessary given the difference between five consecutive days spent in Forest Kindergarten, or five sessions over five weeks in Forest School. The schedule also allows for replication and duplication of the study.

Two adults (one a lead participant) and three children in each case, were positioned as "key informants" (Grunbaum, 2007, p.88), as they were considered to have the required knowledge of Forest School or Forest Kindergarten and able to shed light on their experiences. I specified that each of the child participants in each case or class were aged between 3 and 4 years old

and had at least a year prior experience of Forest School or Forest Kindergarten, as a purposive sample (Wood and Smith, 2016). But as selection of the child participants was partly the decision of the lead adult participant in each case, this was also a convenience sample (Denscombe, 2010; Simons, 2013). Each of the adult and children participants were willing participants and all participants and parents of children involved gave informed consented, and children gave ongoing consent (Section 3.5.1). Full background to the cases (Section 4.2 and Section 5.2) and the participants are available in chapters four (Section 4.4) and five (Section 5.6). Although 3 children from each case took part the study, in the Danish case the individual children consistently played as part of a group, making it difficult to separate the two so the groups became the focus of the study. This selection criteria ensures that the case is not open-ended neither is the data unlimited, but bounded as a coherent, integrated system of each parallel case (Denscombe, 2010; Stake, 1995). Each case is instrumental in exploring the issues and in gaining an insight into Forest Learning in each context (Stake, 1995).

3.4.3.2 Trustworthiness

Validity and reliability can be problematic when carrying out qualitative research and attempting to apply them could distort the nature of the inquiry (Simons, 2013), as they relate to the consistency of a particular instrument to produce the same data time after time (Denscombe, 2010). In a small scale, qualitative study in an educational context, the complexity of each case is the reason for the study, and other researchers would find it difficult to replicate the study and produce the same results. Therefore, Lincoln and Guba (1985) proposed the alternative criteria of trustworthiness and the related terms of authenticity, confirmability, and credibility. Rather than producing identical results the emphasis is on the research process and relates to how the data is negotiated and understood.

To improve the trustworthiness of the study a number of elements can be incorporated, including providing a detailed explanation of the study including data collection and analysis, so other researcher can replicate the process of the study (Bassey, 1999). Included in this study is a detailed methodology and a data collection schedule (Table 3.2). Next, immersion in the case and lengthy engagement with the participants which in this case helped to build trust and improve the honesty of responses from the participants generating authentic research (Lincoln and Guba, 1985). In addition, to strengthen the authenticity raw data can be checked with their sources. In this study interview transcripts were e-mailed to participants for them to confirm they were a true representation of the discussion (Brinkmann and Kvale, 2015; Denscombe,

2010). In addition, the photographs were used in elicitation interviews, with adults and children to agree meaning over the significance of people, places and objects including (Bassey, 1999).

Also, alignment of data elicited from the different sources and participants provides triangulation which strengthens the interpreted meanings (Bassey, 1999; Braun and Clarke, 2013; Stake, 1995). Lastly, sufficient information needs to be included to convince the reader that the conclusions made are justifiable. This study has provided a detailed account with comprehensive information on each case, the location and each of the participants that result in credible conclusions.

3.4.3.3 The pilot study

Before carrying out this study I carried out a small-scale pilot of the data collection methods in a Forest School session in England. Trialling the methods of photo tours involved the use of I-pads (Clark and Moss, 2001; 2005; Dockett and Perry, 2005; Einarsdottir, 2005; 2007) with three children, aged three and four, followed by a group photo elicitation interview (Clark and Moss, 2001; 2005). The purpose of the photo tour was to collect information on the children's favourite places, as an indicator of their experiences and interpretations of Forest School as their reality (Gilbert, 2009; Thomson, 2008). The rationale for the pilot was to see whether the method was effective at gaining children's perspectives, based on the photographs taken and the explanation given, as well as gauging their ability to use the I-pads. The photo tour phase went well, and all three children enjoyed showing me around 'their Forest School' and taking photographs of their 'favourite places'. The children were not limited by the number of photographs they could take, and the highest number taken by one child was 20. This helped me decide to not to limit the number of images they could take in the actual study. All three children were confident using then I-pads and talking to me about their favourite places.

The purpose of the elicitation interview was to clarify my understanding of the significance of the places, people or items children had chosen to include in the photographs and agree their meaning behind the data (Bassey, 1999). However, the group elicitation was challenging. To make the children feel relaxed, I decided to use a group situation placing less emphasis on one individual child. However, when I tried to group all three children together, the three photo tours because of the time lapse, it was very difficult to collect the children together, and re-engage them. Even when I had got them together in a quiet place to talk about their photos and favourite places, it was difficult to generate a discussion and they only spoke briefly about the

content of their photographs, (Roberts-Holmes, 2014). As a result, in the study I did elicitation interviews with the individual children after each photo tour.

3.5 Ethical considerations

A commitment to ethical principles is fundamental to any research and particularly relevant to this study of adults' and children's views and experiences of Forest School. As the research was carried out in England and Denmark this study considered the ethical guidelines and principles set out from each country, alongside those from Bishop Grosseteste University (BGU., 2015). For example, the British Education Research Association (BERA., 2011) ethical guidelines are based on the main principles of respect for all participants, prevention of harm, reciprocity and equity (Brooks, teRiele, and Maguire, 2014), which relate closely to the principles of honesty, transparency, and accountability in the Danish Code of Conduct for Research Integrity (DCCRI., 2014). The principles of all three documents were considered and combined to form the following areas of consent and assent, anonymity, prevention of harm and agency which were articulated in the research ethics clearance form (see Appendix 1) and was approved by the BGU ethics committee. By setting out the process and adopting this ethically aware position throughout the research process, the actions, relations and interactions between researcher and participants have been influenced by these ethical principles (Bassey,1999; Brooks, te Riele, and Maguire, 2014; Miles and Huberman,1994; Robson, 2002) and protocols followed with respect to all participants (Christensen and Prout, 2002; Dockett and Perry, 2007).

3.5.1 Consent and assent

After gaining ethical approval (Appendix 1) from the Bishop Grosseteste University (BGU) ethics committee contact was made with potential sites for data collection via e-mail (Appendix 2). Once agreement to participate was obtained a further e-mail and research information sheet (Appendix 3) was sent to each setting, to communicate a full and honest explanation of the nature of the research methods used, what participation involves for the setting and the adults, parents and children (BERA., 2011; DCCRI, 2014), and a consent form that was also translated into Danish (Appendix 4 and 5).

Due to the distance and time constraints of travelling to Denmark, informed consent was secured from adult participants and parents of child participants before the research process

started by each setting. Although not ideal, this process was duplicated for the English case to maintain consistency in the field work across cases. To maintain integrity of the research and respect for the participants and integrity of the research and to obtain ongoing assent throughout the study I actively reminded all participants of their right to withdraw without consequence. This was done verbally with the adults and with a face chart (Appendix 6), for children to point to the smiley face if they were happy to participate (Cutter-Mackenzie, Edwards, and Widdop-Quinton, 2013; Dockett, Perry, and Kearney, 2013). All data including interview audio recording and photographic images were stored securely, password protected and encrypted on electronic devices in accordance with the Data Protection Act (1998). All data will be destroyed after completion of this project.

3.5.2 Anonymity

As far as possible the identity of each individual and the two settings have been protected, through the use of pseudonyms (Flick, 2014). Descriptions of each case have been carefully constructed to maintain anonymity, yet portray detail (Thomas, 2016). This is especially important in case study research where the rich detail of each case is important and might make identification of both the location and individual easier. However, as photo data might contain images of places and faces of individuals permission was sought to use these within then research report, even though this might result in identification of the individual or setting. Consent was included on the research consent sheet (see Appendix 4 and 5).

3.5.3 Prevention from harm

In both my roles as early years educator and university lecturer, I have participated in regular safeguarding training, so I am aware of safeguarding procedures and my responsibility regarding reporting any area of concern. Therefore, I am confident that should any concerns arise during the data collection, for example disclosure or any illegal behaviour, I am able to give these matters careful consideration. If appropriate I would be able to take the necessary action and follow the correct procedures which may involve informing the authorities, whereby confidentiality and anonymity would be waived (Bassey, 1999; BERA, 2011).

3.5.4 Voice

Particular attention was given to ethical values that specifically relate to research with young children (Page, Clare and Nutbrown, 2013; Simons, 2013), as it is the child's right to participate and have their view represented. It was important to be aware of the balance of voice between adults and children, researcher and participants (Brinkmann and Kvale, 2015), within the data, rather than a tokenistic participation (Hart, 1997). In the Danish phase of this study, where I used the pedagogue as a translator to understand the children there was more than the usual capacity for power dynamics, which could have resulted in the adult's presence influencing the child's contribution. In both cases, to ensure the child's voice was represented, and to minimise any misunderstandings the elicitation interview was used as an opportunity to confirm the children's meaning, while the transcribed audio of the photo tours provided further validation.

To maintain the social reality of each case, a balance needed to be struck between the different voices represented within the data and in the final report (Vandenbroeck and Bie, 2006). Throughout the research process it was important to maintain authenticity regarding the data collected from all participants, while trying not to let any one voice dominate, while trying as far as possible to present an honest and reliable interpretation of the data (Brinkmann and Kvale, 2015). Finally, when writing the final report care was taken to represent a balanced presentation of adults and children's voices, giving them equal space within the published document (Vandenbroeck and Bie, 2006). To ensure the adult was fairly represented in interview and observation transcripts of both were emailed to the adult participants for them to confirm they were a true representation of what was said or what happened (Brinkmann and Kvale, 2015; Denscombe, 2010). In addition, during the study collected data was available for participants and parents of child participants to read or look at if chosen. This was stated on the research information sheet (Appendix 3).

3.6 Reflexivity

Everyone including researchers are products of their social and cultural environment and personal experiences, as we attach meaning to things that happen (Denscombe, 2010). Making sense of what is seen and heard during a study that is focused on the social context of each case relies on what the researcher already knows and believes (Denscombe, 2010). The researcher can only report on things as they see them, resulting in research that is not neutral but subjective (Cresswell, 2014). Being aware of our subjectivities and making them part of the research process allows the reader to consider the study in relation to them (Cresswell, 2014). An integral

part of this study is the researcher's "self" or the researcher's identity, values and beliefs and experiences (Denscombe, 2010, p.87). For this study I have reflected on my personal values and beliefs and how these may influence this research.

During the study it was important to build a rapport with both the children and adult participants to gain an authentic response to questions (Grieg and Taylor, 1999). I was able to do this because of my experience of working with young children, although I was aware that there could be an unintentional power in-balance between the researcher and the children or adult participants. I was able to use my many years of experience talking with young children as an early years educator to make the children feel comfortable and as relaxed as possible when carrying out the photo tours and elicitation interviews. I used a similar approach with the adult participants and tried to chat informally with them (Brinkmann and Kvale, 2015).

In addition, although I have not participated in specific Forest School training, my experience of working with young children has involved outside play. My experiences and the knowledge of the benefits play has for young children, including my appreciation for both the social and emotional benefits for being outside and having access to open spaces and fresh air (Kaplan, 1995), have influenced my view of Forest School, Forest Kindergarten and this research. Further my personal pedagogy of how children play and learn through engagement with others and the environment favours a constructivist perspective, which has also shaped this thesis.

Further, I am aware that my experience of the English early years system as an educator and as a parent has further informed my subjectivity. I am also aware that before this study I was less informed practically and theoretically about the Danish early years education system. Reflecting on these experiences, values and beliefs has made me aware of how they might influence my interpretation of events during the study. I have tried to be conscious of forming opinions prematurely and trying to be directed by the data and as a far as possible keeping an open mind. For example, consider alternative interpretations, and trying not to ignore data that does not fit with the narrative of the report (Denscombe, 2010). Also, I used a reflective journal (Appendix 7) throughout the study to jot down my thoughts to reflect my experiences and interpretation of events (Stake, 2006; Yin, 1994).

3.7 Methods

The methodological framework that forms this chapter is based on research methods that have previously been piloted in small scale study in a different location. Fieldwork for this thesis

was undertaken in 2016 and data was collected over 4 months from March to June. Data from the English case was collected first in England, because of the weekly sessions it was only possible to collect data over five consecutive weeks. Then because of travel to Denmark and Forest Kindergarten happening every day it was possible to collect the data over one week. To maintain consistency data was collected over five visits. The data collection schedule (Table 3.2) shows the chronological order that data was collected, with the same sequence applied to each case (Yin, 1994). Table 3.3 shows how each method captured data relating to the three research questions. Each single case, although different can be dealt with consistently (Stake 1995) making it possible to replicate elsewhere (Arsel, 2017).

Research Question	Data Capture
RQ1: What are adults experiences and interpretations of Forest School in England or Forest Kindergarten in Denmark?	Walking interviews and Tour Semi-structured interviews Photo Tours and Elicitation interviews Observations Plans (document)
RQ2: What are children's experiences and interpretations of Forest School in England or Forest Kindergarten in Denmark?	Photo Tours and Elicitation Interviews Observations
RQ3: What are the similarities and differences between the Forest School and Forest Kindergarten environments and how do these impact on the experiences of their users?	Walking Interview and Tour Semi-structured interviews Photo-Tours and Elicitation Interviews Observations

Table 3.3 Shows how data collected relates to the research questions.

Data was collected using different types of interviews including walking interviews, elicitation interviews and semi-structured interviews, which are presented together here in order, although the semi-structured interview was carried out last (Table 3.2). In addition, photo tours and observation are also explained. All three instruments are appropriate for adults and children and have been widely used in similar research such as the Mosaic Approach, that pioneered

participatory methods with young children (Clark and Moss, 2001; 2005). In addition, these methods have also been used individually in previous Forest School research by Davis and Waite (2005) and Massey (2002).

3.7.1 Interviews

Interviews are conversations with a structure and a purpose (Brinkman and Kvale, 2015). This study uses three different types of interview: walking interviews, semi-structured interviews and elicitation interviews. Each form of interview offers a slightly different approach, structure and purpose which are summarised below. Interviews are a useful way of developing a professional conversation to gain an insight into individual views and a deeper understanding of their knowledge, and how they have constructed their reality.

3.7.1.1 Walking Interviews

In the first instance I started collecting data using an informal tour of the site or walking interview with the lead adult participant (Langsted, 1994). The walking interview was multi-purpose. First to familiarise myself with the geographical layout of the site (Brinkman and Kvale, 2015) as from it I was able to map out each location (Figure 4.1 and Figure 5.1). Secondly to start to negotiate the research relationship between the researcher and participant (Grieg and Taylor, 1999). Lastly, to reveal adult knowledge and understand their reality of the case (Stake, 1995). The Forest School tour took approximately 20 minutes, whereas in Forest Kindergarten it took slightly longer, because it was a larger site. As the first unit of data collected it was important to begin to understand the case.

To achieve all three aims the walking interview was relaxed and viewed throughout as a conversation with a purpose (Simons, 2013). The adult participant was positioned as the expert with knowledge, which involved them taking the lead and directing the tour after being asked to 'Show me around' (Brinkman and Kvale, 2015). This unstructured approach was achieved by asking questions spontaneously as they arose from the general conversation or location such as 'This looks interesting what happens here?'. This required a high level of skill and knowledge from the interviewer to produce information from the conversation (Brinkman and Kvale, 2015). Immersed in the situation the interviewer practised careful listening and

questioning deciding in the moment whether to follow up on a comment or not (Brinkman and Kvale, 2015). However, with informality there is a risk that the interviewer may not get adequate information or not ask appropriate questions (Arsel, 2017). Semi-structured interviews were used later as an opportunity to ask any unanswered questions and clarify and issues.

Informal, walking interviews can mean that the participant can forget or not realise they are being interviewed (Arsel, 2015).While a relaxed atmosphere can provide more authentic answers, however, for ethical reasons it was necessary to inform the participant that the walk was part of the data collection and gain consent to audio record it (Arsel, 2107). In addition, the informal approach limited any effects researcher presence may have on the practitioners and put the adults at ease and ensure the situation was unthreatening, particularly in relation to any perceived power differential between the researcher and participant (O'Reilly, 2012). The walking interviews were audio recorded and transcribed.

3.7.1.2 Elicitation Interviews

Elicitation interviews, in this study were informal conversations carried out with the child and adult participants aimed at eliciting more information from the photograph data (Clark and Moss, 2001; 2005). In addition, the elicitation allowed the researcher, to confirm the meaning of the photographs and prevent any misunderstanding (Hill, 2005). Elicitation interviews have been used in this way in previous studies with young children (Clark and Moss, 2001; 2005; Arksey and Knight, 1999) and more specifically in Forest School research by Davis and Waite (2005). When trialled in the pilot the elicitation interviews were carried out with all three children, however too much time had elapsed, and the discussion was limited. Hence, for the study the photo tours were carried out individually, immediately after each tour.

After the photo tour, which is explained in more detail in Section 3.7.2, I sat with the child sat in a quite spot and the children were asked to 'look back at your photos'. In the Forest Kindergarten, the pedagogue sat alongside and translated for me. The elicitation of the photographs provided an opportunity for the researcher to fact check and come to a shared understanding of the significance or meaning of the places or important aspects to their play or activities captured in the images (Hill, 2005). To locate the conversation in the child's experiences (Smith, Duncan and Marshall, 2005), the researcher asked questions such as 'What

do you like doing here?' or 'What do you play here?', 'Who do you play with here?'. Through this process the children provided an insight into their experiences and were able to tell their own narrative of the play and places important to them (Brinkmann and Kvale, 2015; Collier and Collier, 1986). With the adult participants photo elicitation took place at the same time as the semi-structured interviews. Revisiting the photos at the end of the data collection provided an ice breaker and focus for the start of the interview (Brinkmann and Kvale, 2015). As gaining the adults and children's perspective and an insight into their world and experiences is an important part of this study, the photo elicitation was useful in eliciting a more accurate understanding, as well as acknowledge the child's or the adult's interpretation may be different to that of the researcher (Fargas-Malet et al., 2010; Punch, 2002).

Audio recording of both the photo tours and elicitation interviews could be referred to later during analysis (O'Reilly, 2012), and provided a way to clarify any areas of uncertainty, resolve any misunderstandings, and provide more background information (Hill, 2005). This was particularly useful with the Forest Kindergarten data where the pedagogue had translated. The photo tour and elicitation data combined with observation and interview data build up the story of each case and provide a context to the social reality of the case (Stake 1995), while triangulation of data that confirms a finding from more than one source improves the trustworthiness of the findings (Einarsdottir, 2005; Gray, 2012; Greenfield, 2011; Newman, Woodcock, and Dunham, 2006).

3.7.1.3 Semi-structured interviews

Depending on the type selected (structured, semi-structure or unstructured), interviews are useful for gaining a new insight into an issue or area of interest from the perspective of the interviewee, which is relevant for this study (Brinkman and Kvale, 2015). Rather than using a structured interview with a set of exact questions, the semi-structured interview was selected for this study as it is more flexible and allows for the exploration of a complex phenomenon, such as Forest Learning. The semi-structured approach allowed for a mixture of straightforward questions relating to background information, followed by more probing questions that require lengthy, detailed and personal responses (Denscombe, 2010).

Reliability and trustworthiness in interview data are important especially in semi-structured interviews with the potential for leading questions to be asked (Brinkmann and Kvale, 2015).

To maintain consistency across the two cases, provisional questions were colour coded for easy reference and the main 8 areas to be covered were listed (Appendix 8) and as an aide memoire referred to during the both semi-structured interviews (Arsel, 2017). To minimise any bias an interview protocol was followed to ensure similar procedures were replicated across both cases (Arsel, 2017; Yin, 1994). In addition, the semi-structured process was open to change. Depending on the answers given by the interviewee, follow up questions could be asked (Brinkman and Kvale, 2015). To help account for the different nature of each case (Maynard, 2007a; 2007b), additional questions generated by events or observations over the course of the data collection specific to each case were added to validate the findings (Brinkmann and Kvale, 2015). It is worth noting that the two cases were being studied for their typicality, and so to identify any differences between the two. Consequently, to understand each case fully, the identified differences were explored further through individual 'probing' questions (Brinkmann and Kvale, 2015). Which although necessary for understanding each case, it may take the two interviews in different directions. Therefore, using the prepared questions based on central themes from the literature kept the interviews on track.

The quality of interview data can be limited by interviewees saying what they think they *should* say and not necessarily what they do, while the personality of the interviewer may have an effect on the interviewee or the "interviewer effect" (Denscombe, 2010, p.178). To minimise both limitations different types of questions were used throughout the process, to achieve different information. For example, at the start formal or introductory questions were used to gain background information about the adult participant, for example their qualifications and years of experience, also information about individual children such as exact age. Next the elicitation interview used photographs from the photo tour which provided a focus early on to relax the interviewee. Then using the themes from the list using an open style of questioning such as, 'Tell me about…?' (Brinkmann and Kvale, 2015) as the interview went deeper into personal experiences and philosophy of Forest Learning. Probing and follow up questions were used to extend or confirm detail alongside 'mmm' or a pause to invite the participant to continue. In addition, interpreting questions were used such as 'Do you mean? Or am I right in thinking?' to confirm understanding (Brinkmann and Kvale, 2015). Lastly structuring questions were used to redirect the participant or keep them on track with their response, for example 'Let's move on to…' (Brinkmann and Kvale, 2015). The different techniques encouraged a

dialogue to develop between both the interviewer and interviewee as a valuable part of understanding each case (Brinkmann and Kvale, 2015).

Leaving the semi-structured interviews until the end of the project (Table 3.2) allowed time for a research relationship to build between the researcher and the main participant. The researcher and participants were able to have an in-depth discussion and talk freely to achieve the most authentic and open responses (Grieg and Taylor, 1999). The semi-structured interviews were audio recorded and carried out with the main adult participant in each case, in a quiet room away from distractions and lasted approximately an hour. Gray (2012) suggests that the audio should be transcribed as soon as possible after collection. In the Forest School case audio was transcribed before the next visit, however the daily nature of data collection in Forest Kindergarten, meant that transcription was carried out later, and the audio was listened to so questions arising could be added to the semi-structured interview notes. All transcripts were e-mailed to adult participants for them to agree that the details are representative of the discussion (Brinkmann and Kvale, 2015; Denscombe, 2010).

3.7.2 Photo Tours

Photo tours were used by Clark and Moss (2001) in the Mosaic Approach. The idea of using a tour as a way to collect information about an environment from those who live there, was based on Hart's (1997) transect walks. A similar approach was used by Langsted (1994, p.35) in his Scandinavian study of children's lives. The photo-tour is led by the child, who is in charge, showing the researcher around the environment and documenting the event by taking photographs. In this study to gain the children's and adult's perspective as a "living picture of their lives" (Clark and Moss, 2005, p.13), photo tours were carried out individually with the main adult participant and three child participants over two sessions (Visit 2 and 3 in the schedule), and replicated across both cases (Table 3.2).

Rather than using disposable or digital cameras used previously by Clark and Moss (2001; 2005), this study opted to use digital tablets or I-pads to enable young children to physically operate the device, regardless of their physical dexterity or skill. In addition, images on the i-pad are accessible immediately meaning children can see the image, which was also useful for elicitation later. During the data collection the children's use of the digital devices was variable with different degrees of confidence, although all managed to use the device independently (Fargas-Malet et al., 2010).

Images selected are a powerful way to show how individuals use particular places, while also illuminating an individual's perception of places, and experiences, which can be interwoven with their feelings or emotional connections to places, revealing their social reality (Gilbert, 2009; Laslett, 1976; Scott, 1990; Thomson, 2008). The series of images taken become a 'photo narrative' (Burke, 2008, p. 31), and a strength of using photo tours is that they offer a way for children to communicate their thoughts and ideas without having to speak (Clark and Moss, 2001; 2005; Davis and Waite, 2005; Dockett and Perry, 2005; Einarsdottir, 2005; 2007), which is especially useful to overcome any potential language barriers, particularly in the Danish case. After checking that each child could use the i-pad, each was asked to 'Show me your Forest School' and if required prompted with 'Show me where you play, Show me places you like, Show me things that you do and take photos'. The researcher followed the child's lead and was taken around the site by them. The children talked and responded to my questions such as 'What do you play here?' as they took photographs of their favourite or important places, people, and things. In Forest Kindergarten the pedagogue came as well to translate.

However, the pictures only tell part of the story and for an accurate interpretation by the researcher further verification can be achieved through dialogue (Burke, 2008). With permission the tours were audio recorded and transcribed so if required they could be returned to for confirmation of meaning, and cross referenced alongside the images (Clark and Moss, 2001; 2005). Within any human research there is the possibility that respondents could second guess what researcher wanted them to say (Langsted, 1994) and the research ends up tokenistic (Hart, 1997). In this study, elicitation of the images helped to minimise both issues and were carried out after the photo tour with each child individually. So, although the presence of the pedagogue was not ideal for both the photo tours and elicitation, as translating involved an element of interpretation (Twinn, 1997), I had to trust that she had translated the children's and my words and intentions accurately.

Given the potential for power dynamics between adults and children, especially with the pedagogue's presence in Forest Kindergarten it was important to maintain a symmetrical balance of power by minimal interactions, allowing the children to take the lead (Vandenbroeck and Bie, 2006). The children had control over the use of the i-pad and the images taken, while the researcher remained as passive as possible with no control and little idea of the photos being taken (Barker and Weller, 2003). Giving children the responsibility to collect data even though I had piloted the approach earlier was risky and I worried about the quality of the data, even knowing that in the pilot the children had participated successfully, it took a deliberate effort

from me to not look at the images or interfere. Some children asked me to take images of them, which I did. Based on the pilot where the children did not exceed 20 photos, there was no limit to the number of images the children could take. Also, each case was bounded by the number of participants to limit the photographic data (Stake, 1995). After each tour I reflected on events and made notes in my journal (Stake, 1995) on the children's behaviour during the interview, particularly in the Forest Kindergarten in case with hindsight there was anything to suggest the children were behaving differently because of the pedagogue's presence (Denscombe, 2010).

3.7.3 Observation

Observation was selected as it provides a distinct way to collect data for this study. Using direct observation recorded as field notes (Appendix 9) in a natural setting draws on direct evidence from an "eye-witness" to provide first-hand detail of what happens (Denscombe, 2010, p. 196). Providing information on the everyday context that cannot be obtained through an interview or questionnaire that relies on what the participant tells the researcher (Bassey, 1999). Observing specific events including social interactions provides the rich description needed for case study (Stake, 1995). In addition, observation is a way of capturing the experiences of those "less articulate" which in this instance applies to children and any potential language barriers (Simons, 2013, p.55). Lastly, observation provides a way to cross check with other data collected from the interviews and photo tours and strengthen the validity of the accounts (Simons, 2013).

An initial observation was important to establish a baseline for what is typical in each context (Yin, 1994). Taking field notes (Appendix 9), I familiarised myself with the routine, events, and features of everyday life in the case (Bassey, 1999), to build up a picture of each case as a whole (Greenfield, 2011). In addition, the researcher would be familiar with behaviours typical to each case. Any potential differences in practice that arise during data collection may be attributed to participants changing their habits, or knowing they are being observed, and as far as possible can be interpreted as such (Bailey,1996; Yin,1994). Thus, preventing the researcher from interpreting a-typical behaviours as normal.

In each case four unstructured observations (recorded using field notes) were carried out to see first-hand the experiences of children and adults. One adult in each case was observed during an activity. Then each of the three participant children were observed playing in their favourite places (determined from the photo tour data). Using an unstructured style of observation, the

observer recorded events and interactions that occurred during 20 to 30 minutes of activity (Wood and Smith, 2016). As it is difficult to be a non-participant with young children (Merriam, 1988) the researcher was positioned as a participant observer (Cresswell, 2014), trying to have minimal interaction with those being observed (Denscombe, 2010) and still be able to make notes (Thomas, 2016). Watching and listening as events unfolded made it easier to understand what was happening more clearly (Thomas, 2016).

During observation of the Danish children it was difficult to separate Anneka and Oskar from their groups, the fairy girls and sand boys, although I decided to continue with the observations as planned. In England, where data was collected first, the children mostly played on their own, making like for like comparison difficult. Later, when reflecting on the data, I considered this anomaly would reveal more about each case and the differences between them, for example children's social interactions, thus providing a deeper insight into events that could not be elicited another way (Kumar, 2014).

The researcher's words in the field notes provides a rich, narrative description (Stake, 1995), although there is a danger that the researcher can see what they want or expect to see and mis-interpret actions (Denscombe, 2010; Kumar, 2014). Observing participants in their usual surroundings, as part of a whole case alongside other data, such as interview transcripts and photographs findings can be verified through triangulation and can minimise the risk of any events being mis-interpreted (Cohen, Manion and Morrison, 2011; Greenfield, 2011; Warming, 2002). In addition, to prevent the potential for bias the purpose of the observation and notetaking was focused on individual and group behaviour, and social interaction. However, as an observer there is an 'inherent tension between understanding the process as an outsider and being sufficiently objective as an "insider" (Davis and Waite, 2005, p.7). To acknowledge my subjectivity and remain reflexive I made notes in my journal (Appendix 7) after each observation (Stake, 1995).

Each observation lasted between 20 and 30 minutes depending on individual circumstances, and finished on a natural break, which was considered long enough to be representative of the case and gain a sense of the social situation (Denscombe, 2010), although to maintain consistency across participants and cases it was important to not go beyond this time allocation and risk skewing the data. Contextual factors were recorded such as time of day, and weather to give a full account and help explain events and interactions (Denscombe, 2010).

3.7.4 Journal and field notes

Research is never neutral (Denscombe, 2010) so it is necessary for the researcher to be aware of their personal values, beliefs and experiences which shape both the nature and process of research, and be reflexive in two ways, functional and personal (Wilkinson, 1998). Functional reflexivity involves giving attention to the way our research processes may have influenced the research (Wilkinson, 1998). Assumptions made concerning ontological subjectivity are important and go beyond decisions regarding sample size, instrument design or ethical practice as it is acknowledged that researchers bring their own values, assumptions and experiences or our subjectivities to the research process (Braun and Clarke, 2013). Whereas, personal reflexivity involves making the researcher visible in the research (Wilkinson, 1998), acknowledging who the researcher is, and how their background, values, and experiences, inform assumptions and decisions made by them, shaping the research design and subsequent interpretation of data (Brinkman and Kvale, 2015). In the ethical considerations section earlier the researcher acknowledged their personal background may have influenced aspects of this study (Silverman, 2011). Acknowledging that these subjectivities are influential even if only in a minor way to any knowledge produced and that the study is richer and more credible because of these different perspectives, while the researcher is reflexive and reflective (Braun and Clarke, 2013; Cresswell, 2014).

A way of embracing subjectivity and as part of quality control a reflexive, research journal was kept throughout the project to record feelings, thoughts and reflections (Bailey, 1996; Braun and Clarke, 2013; Stake, 1995). In doing this a researcher's perceptions and interpretations also become part of the research, with a subjective, interpretative orientation flowing through the inquiry (Cresswell, 2014). Keeping a journal (Appendix 7) was useful to reflect on situations and events after they occurred. In addition, reflecting in the journal as soon as possible after data collection for example, after interview and observation can help maintain honesty and authenticity (Stake, 1995). Doing so can help identify and make the researcher aware of any subjectivity evident as well as interpretations which may indicate bias in the study.

Field notes (Appendix 7) were also used to record anything interesting as it happened in the field, as part of the big picture of the setting (Bailey, 1996; Gray, 2012). Noting these occurrences or anomalies, as they occur or as soon as possible after, and prompted questions of clarification to be asked of adults later in semi-structured interviews, strengthening the validity of findings. Detailed notes were frequently returned to as a reminder of the context of a

situation, rather than interpret events in isolation (Braun and Clark, 2006; Cresswell, 2014; Kumar, 2014), which helped build an understanding and honest representation of events occurring in the case (Bailey,1996). Re-reading notes was also useful to keep all participants and voice equal and fairly represented when reporting on the findings. The use of both field notes and journal entries can provide confirmation of the researcher's interpretation of data, resulting in an honest and credible presentation of findings.

3.8 Summary of methods

Gaining the different perspectives of adults and children, through the use multiple methods including interview, observation and photo tours strengthened the credibility of the findings of this study, while confirmation of the findings from more than one source, triangulates and improves their trustworthiness. For this study knowledge is viewed as epistemologically subjective so information is considered as dynamic and subject to the context and circumstances at the time. Analysis of data is explained next.

3.9 Analytical framework: Emergent Thematic Analysis

Thematic analysis is a "foundational method for qualitative analysis" used for "identifying, analysing and reporting patterns" or "recurring themes" that come out of the data (Braun and Clarke, 2006, p.78-79). However, the process that moves raw data to interpretations founded on evidence is not straightforward, especially as qualitative analysis is criticised for a lack of clarity and consistency (Denscombe, 2010). A clear framework for thematic analysis has been applied consistently to all data across both cases that shows the decision-making process and results in a study that is theoretically and methodologically sound (Braun and Clarke, 2006). Thematic analysis is a useful analytical tool as it can be used flexibly, and the process of analysis does not become limited or constrained (Braun and Clark, 2006). The researcher actively selects, edits, and organises data into themes that are of interest and relevant to the research focus (Braun and Clark, 2006) in a logical and rigorous process that gives data meaning (Gray, 2012).

Thematic analysis can be either theory or data driven, although the approach used must be made clear (Braun and Clark, 2006). Thematic analysis driven by themes emerging from the data has

been critiqued for failing to allow theory to guide work at an early stage (Silverman, 2005). Whereas, if themes are derived from literature it can be difficult for the researcher to see what "the data might be saying" (Boyatzis, 1989, p.35). This study started by identifying themes from the data during transcription, then to answer the research questions, revisited the data using themes identified from the literature review (Figure 2.1). Data collected through interview, observation, and photo tours (set out below) in each case has been analysed separately using the same six stages, starting with familiarisation with the data, including transcription. Then as ideas of interest became apparent in the data, they were identified and coded. Next, the overarching themes are searched for, and the themes were reviewed before they are defined and named. In this study, each case was analysed separately before considering the similarities and differences across the two cases were identified (Thomas, 2016; Yin, 1994), then finally the findings were presented in a report (Braun and Clarke, 2006).

3.9.1 Stage 1: Familiarisation of data

Before attempting any analysis, Braun and Clark (2006); Brinkman and Kvale (2015) and Gray (2012) suggest that the researcher becomes familiar with the "emerging story of the data" (Bassey, 1999, p.75). The first phase of this project involved transcribing the recorded interview data to become familiar with the data before attempting any formal analysis. Data from each case was analysed separately before drawing on both cases for deeper analysis and discussion later.

3.9.1.1 Transcription and translation of interview data

Transcription is a key part of analysis and not just the act of recording the spoken word as the written word (Lapadat and Lindsay, 1999). During the transcription process meaning and significance begin to be created (Boyatzis, 1998), as once data is transcribed it is already interpreted data (Brinkmann and Kvale, 2015). Although time consuming and tedious, with the potential for subjectivities and bias to creep in, transcription informed the early stages of analysis and allows for a more thorough understanding of the data (Braun and Clark, 2006). In this project, as a way of maintaining quality and reliability the researcher collected and transcribed all the data (Miles and Huberman, 1994). All the audio data from interviews (Appendix 10) and photo tours (Appendix 11) was transcribed as soon as possible after

collection (Braun and Clark, 2006; Denscombe, 2010). Transcription of the Forest School data took place in-between each weekly visit. Whereas, in the Forest Kindergarten data collection occurred daily so it was not possible to transcribe all data within this time frame. To ensure continuity and to prevent something being misunderstood by the researcher after the event, the researcher listened to the audio recordings and made notes on any anomalies, allowing for any questions to be included in the semi-structured interview. Transcription took place back in the UK.

All transcribed audio recordings were *verbatim* accounts, including utterances and pauses (Brinkmann and Kvale, 2015). It is important for the researcher to be sensitive to problems surrounding language particularly its translation (Alexander, 2001), and whose voice is being represented in the data. For this study, using one pedagogue who translated spontaneously as children spoke was preferable, as it provided consistency across all the data (Twinn, 1997). As a precaution all interviews and photo tours were audio recorded. To validate the data further agreement was sought by e-mailing transcripts to all adult participants to ensure that content was representative of discussions (Brinkmann and Kvale, 2015; Denscombe, 2010), however no one responded.

3.9.2 Stage 2: Generate codes through emergent themes

To maintain the integrity of each single case, and the data sets embedded within it all data was systematically subjected to the same coding process and development of themes. Because of the data collection schedule, this started with Forest School data, followed by the Danish. After familiarisation with the transcribed data in each case, features of interest or significance were manually highlighted. Then across each data set codes were assigned by highlighting and annotating text, then using post-it notes to identify a feature of the data that is of interest, for example 'activities'. Then, as part of the analysis coded data was organised into meaningful groups, that related to the assigned codes (Miles and Huberman, 1994) forming a general list of ideas about what is of interest in the data (Braun and Clarke, 2016). There was some overlap with some phrases being coded more than once (Braun and Clarke, 2006).

3.9.2.1 Analysis of observation data

Observation notes were written up and colour coded (Appendix 9), then used as supporting evidence alongside the interview and photo tour data, of already identified themes and patterns

(Thomas, 2016). In addition, there was scope for identifying interesting observations that were not previously identified. Observation data was specifically useful for revealing information regarding the activity and behaviours of children and adults, as well as highlighting social interactions between individuals and within groups. Observation data was colour coded and themes created then combined alongside interview and photo data to view the data from several perspectives and triangulate findings (Thomas, 2016).

3.9.2.2 Analysis of Photo Tour Data

Photographs are a valuable source of information (Gilbert, 2009; Thomson, 2008), and data collection method in their own right (Flick 2014). Photographs are not neutral, just by being taken implies meaning and significance and therefore can reveal something of individual perceptions, experiences, values, and reality (Gilbert, 2009; Laslett, 1976; Scott, 1990). Collectively they also uncover something of society and social phenomena or social facts (Thomson, 2008). Although photographs offer a connection between the visual and voice, they can be 'read' in a number of way (Thomson, 2008). Even though they offer a unique way to uncover meaning relationships or encoded messages (Williamson, 1995), it is vital to consider whose values, reality, fantasies and ideas are reflected and represented, (Albrecht, 1954; Gilbert, 2009). This "slipperiness" makes analysis a highly conscious, reflexive activity (Thomson (2008 p.ix). By combining data from photographs, with elicitation, observation and interview the findings can be viewed from different angles and the multiple perspectives of different participants resulting in as truthful as possible interpretation (Prosser, 1998). This approach offers a unique perspective with unrivalled information of the perceptions and experiences of children and adults (Einarsdottir, 2007; Greenfield, 2011).

The photo data was analysed and presented three ways, which allowed the unique story of each data set to be constructed, contributing to the holistic picture of each case (Bassey, 1999; Cresswell, 2014; Stake, 1995). First, using elicitation as part of the analytical process each photo tour was viewed and meaning agreed with the participant and researcher. Then each series of photos from each photo tour was collated into a table, with extracts from the audio and colour coded. In addition, each photo tour route was recorded onto a map of the setting (Clark and Moss, 2001; 2005). Themed extracts from the transcribed data were then applied onto mapped photo tours data. Each individual map was scrutinised, and themes identified (Appendix 11). Then all 4 maps from each case were combined using acetates to construct one

complex layered map and annotated (Appendix 12). Although each respondent had a different set of photographs, the three processes combined reveal the similarities and differences across participants for example the playhouse was identified by all participants in both cases (Collier and Collier, 1986).

Further links were made visible across other data sets, such as interviews and observations, forming networks between things to synthesise the data (Bryman and Bell, 2007; Cresswell, 2014; Miles and Huberman, 1994). Rather than viewing the photo data as linear, this process brought the data to life and revealing the relationships as patterns or themes such as places, for example, the playhouse also featured in observation and interview. Findings were interpreted, probed deeply, and analysed intensively with a view to responding to the stated research questions (Bassey, 1999), resulting in the collection of trustworthy and plausible, triangulated data important for maintaining the context of each case and identifying the differences or specifics of each case (Thomas, 2016).

3.9.3 Stage 3: Establish themes

Once all the relevant data was colour coded and annotated, the coded text was grouped with other similarly coded extracts to form themes (Braun and Clarke, 2006). For example, places, people, activities or games, resources or equipment, relationships, and interactions. A thematic map (Appendix 13) was used to visualise these themes and build up the picture of the data (Braun and Clarke, 2016). Identifying connections between and across themes and data can be tricky particularly with many possible interpretations of the experiences and explanations of reality around the collected data, but by exploring "key factors, concepts or variables" relationships can be recognised (Miles and Huberman, 1994, p.18). Initial codes were reviewed by reading and re-reading all the data relating to specific themes. Building on the transcription of interview data, observation and photo tour data was coded and combined to identify patterns and triangulate findings. The intention was to iteratively build on the analysis of data during the data collection process by constantly revisiting it in different ways (Arsel, 2017). During this process of refining and defining some themes were combined into one theme with sub-themes, while some large themes others split forming a new separate theme. For example, activity became a larger theme with play and resources as sub-themes within it. These themes were conceptualised on a "thematic map" (Appendix 13), (Braun and Clark (2006, p.86). The relevance of each theme and the extracts of data within it were considered as either representative of the context of each case as a whole or as a way of answering the research

questions. All data from interview, observation and photo tours was analysed and coded using the same process creating a hierarchy of relevance in relation to the research questions (Braun and Clark, 2006). Knowledge of each case from field notes and the observations helped support these decisions and maintain the integrity of each case.

3.9.4 Stage 4 Reviewing themes: The constant comparative method

Finally, themes elicited from all collected data: photos, elicitation, interview, and observation were grouped together. The constant comparative method is the mainstay of interpretative analysis, as it involves consistently going through the data iteratively, revisiting the data sets (Thomas, 2016). By constantly comparing each element alongside all the other elements refining the concepts and building into an explanation and understanding of the data and themes (Thomas, 2016). Whilst consistently applying the process of identifying themes and patterns constantly and consistently to all data sets, results in findings that have captured the essence of the data. Some themes are identified as latent themes, whereas repeated patterns of meaning within different data sets are viewed as commonly recurring themes (Braun and Clarke, 2006). It can be tricky to interpret data that contributes to a useful analysis so it is important to study the meanings people construct around their situation and experiences to better understand the social world, critically assessing it using reflective thought and weighing up the strength of evidence (Thomas, 2016).

3.9.5 Stage 5: Define and refine themes

Once all the data extracts had been collated it was possible to refine the themes and establish the "essence" of each them (Braun and Clarke, 2006, p.91). The thematic map (Appendix 13) helped to conceptualise the themes, patterns and relationship of data extracts from multiple sources and perspective of participants, which were collated and organised with an accompanying narrative, which identifies what is of interest to the study. A worked example of this process can be seen in Appendix 11. The colours to code each set of data are the same and correspond to those used in the thematic map (Appendix 13).

Each theme then became a section in its own right, as well as integral to the developing picture of each case (Braun and Clarke, 2006). Some themes will have sub themes and were useful for structuring a large or complex theme. Then assigning names to each theme can give the reader a sense of what it is about (Braun and Clarke, 2006). Themes and sub-themes were organised

using the three main themes (adult, child, and environment) identified in the literature (Figure 2.3) to produce figure 5.3. It was then possible to compare the similarities and differences across each case and between the literature with the data from this study, which combined to produce figure 6.1 and illustrate this study's new contribution to the field.

3.9.5.1 Triangulation

Triangulation is when data can be corroborated from more than one method (Interview, observation photo tour) or different source or perspective (adult or child), (Denscombe, 2010). When data from different sources or perspective aligns it gives weight to the interpretation and assertions (Braun and Clarke, 2013; Denscombe, 2010; Stake, 1995). Comparing and contrasting data and perspectives to achieve triangulation can be demanding, although it provides a fuller picture of case resulting in more trustworthy, authentic findings (Denscombe, 2010; Thomas, 2016).

3.9.6 Stage 6 Writing the report

The final part of the six phases involves writing the report. For this cross-case study the findings of each single cases are presented in chapter 4 and 5, with a separate discussion forming chapter 6. Braun and Clark (2006, p.86) suggest using "compelling extract examples" from collated themes, that relate findings back to the original research questions and literature. The aim is to produce a narrative that tells the story of each case as a response to the research questions.

It is the role of the researcher to make links as they understand them (Ely et al., 1997), and how they "theorise meaning" (Braun and Clarke, 2006, p.84). This involves making decisions and acknowledging the decisions they have made. Further it reveals "unique insights from analysis" through "analytical thoughts" with the purpose of developing ideas, to promote understanding and increase professional knowledge (Thomas, 2016, p.23).

3.10 Summary

This chapter has presented a structured and replicable methodology for this project that has been influenced by three key factors. The aims and focus of the research (Merriam, 1988), philosophical assumptions and the main characteristics of case study (Yin, 1994). The aim of

this study was to understand more about the practice and processes of Forest School by looking at it alongside Forest Kindergarten to identify any relationship between the two.

The subjectivist ontology and interpretivist epistemology coupled with this holistic, multiple case study approach (Yin, 1994) using the methods of interview, observation and photo tour provided data from different perspectives. Thematic analysis of data offered an insight into the social reality of each case from a range of perspectives that are jointly constructed through social interactions and bound by time. As the best way to explore and understand the experiences from the perspective of those involved consideration was given to ethical issues relating to participation, particularly young children. Building each case, from data collected using the same methods allows for any differences in each case to be clearly identified, while also revealing similarities and potential links between the two approaches. Finding from each case are presented as separate chapters.

Chapter 4 - Findings from Forest Kindergarten, Denmark

4.1 Introduction

This chapter is set out in two sections. The first section offers background information regarding the Forest Kindergarten site, for example: how the space is used; participants; routine; and the relationship between curriculum and planning. The second section presents findings using data collected through observation, interview and photo tours. Although similar to the English case some sections within this case differ as different priorities emerged from the data.

4.2 Background

In Denmark, *bornehaven* or kindergarten is for children aged between 3 to 6 years (OECD, 2014). This example of kindergarten happens in a wood, so could also be called *skov-bornehaven,* which translates as a *wood* or *forest* kindergarten (Williams-Siegfredson, 2012). As the closest example to Forest School, Forest Kindergarten is the most appropriate example for this thesis and the term will be used throughout to refer to this. In Denmark, early years professionals who work with pre-school children in formal settings are called pedagogues (Williams-Siegfredson, 2012). Therefore, as all adults fulfil the same role, throughout this thesis the term pedagogue will be used to refer to all early years professionals from the Forest Kindergarten.

The location used for this study was used by three separate kindergarten organisations who travelled daily from Copenhagen to the country, a process called *flutter-bornehaven.* Each of the kindergartens are organised and run separately, although they share the building and the grounds. Each organisation has approximately 65 children split in groups. One organisation agreed to participate in this study, and so is the focus of this work. Nine pedagogues, four males and five females, worked within the kindergarten, and for management purposes such as registration and lunch the 65 children were divided into three cross age groups, the *guldsmed* or dragonfly group, the *mariehøne* or ladybird group and the *fakes* or foxes. The pedagogues and children of *guldsmed* or dragonfly group agreed to participate in this study. As there is no physical separation outside, children from all groups and all institutions use all the space across the whole site and can interact with all the children and pedagogues. Consequently, at any time there could be up to 180 children from all three organisations using the outside space in any permutation of children, playing in any part of it.

The *guldsmed* or dragonfly group had 22 children aged between 3 and 6 years old, with 3 pedagogues, Erika, Palle and Marc. All participants in this case were given Danish pseudonyms. Each pedagogue is trained to undergraduate degree level in education, specialising in outside education or social pedagogy. Marc has additional expertise and training relating to 'husbandry' and so is responsible for the chickens and other animals in the kindergarten. Erika agreed to be the main participant for this study, she speaks fluent English and lived in England for 16 years. She acted as a guide and translator during the week and was interviewed as part of the study. Marc was also observed doing a whittling activity.

4.2.1 Outside space

The kindergarten is located near to farmland. The aerial shot (Image 4.1) shows the main building outlined in red, and to the front of the site is a car park and the main road. Behind the building and outlined in yellow is the kindergarten site. Although there are residential properties around the site, to the rear and behind the play area it is dense with trees and large bushes. The southern boundary borders onto farmland, in addition there is a large forest within walking distance. The drawn map (Figure 4.1) and the identification key (Figure 4.2) shows the detail of the kindergarten site more clearly, including the location of the fixed resources, for example, swings, slides, climbing frame, football pitch, sheds or play houses, tee-pees, a water canal, sand box and picnic benches. Other smaller, resources are not included in either because of their portable nature. Erika told me that when the fixed equipment was purchased it was chosen by the children.

Image 4.1. Aerial view of Forest Kindergarten.

Gate

Building
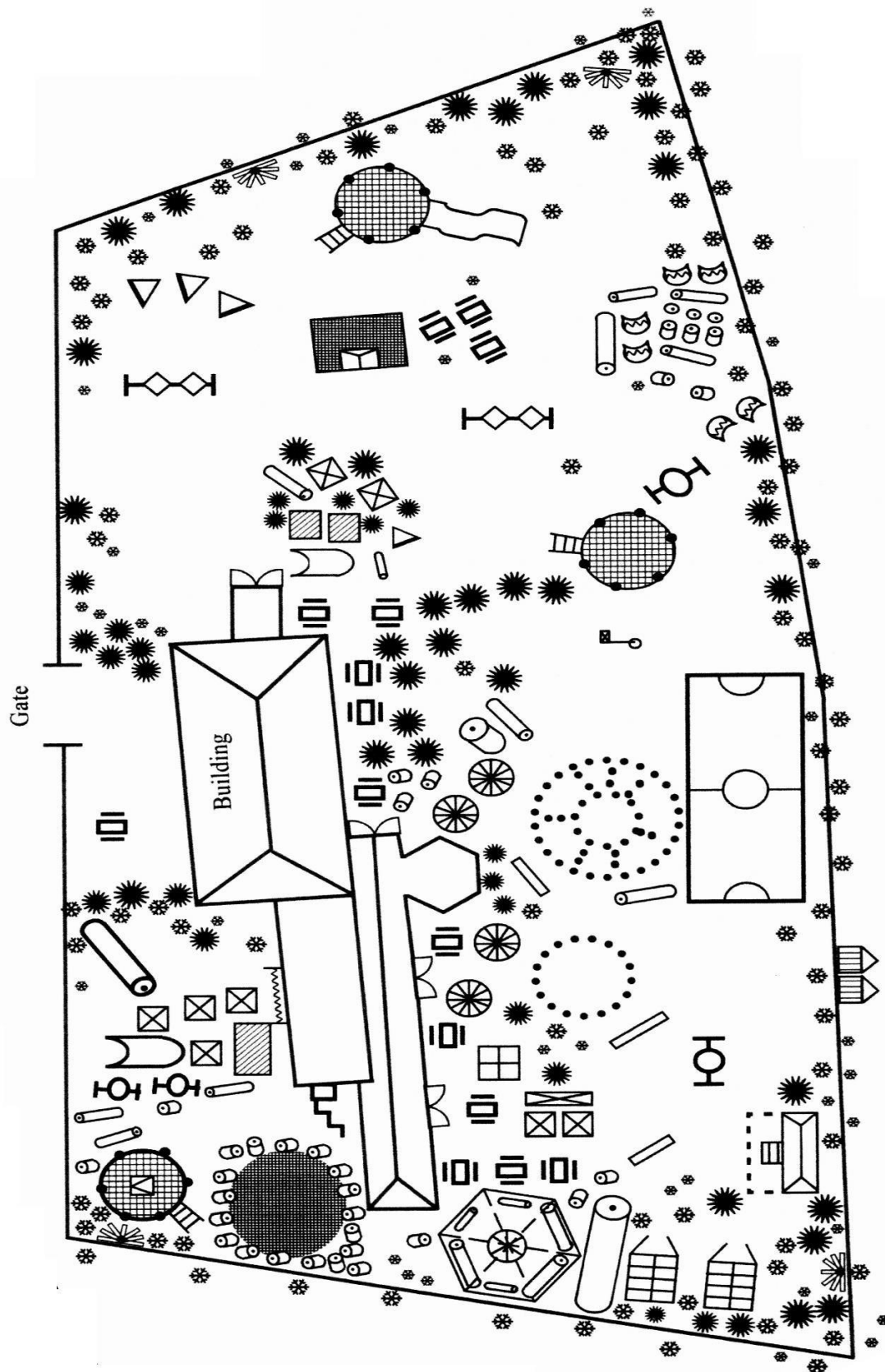
Figure 4.1. Map of Forest Kindergarten.

119
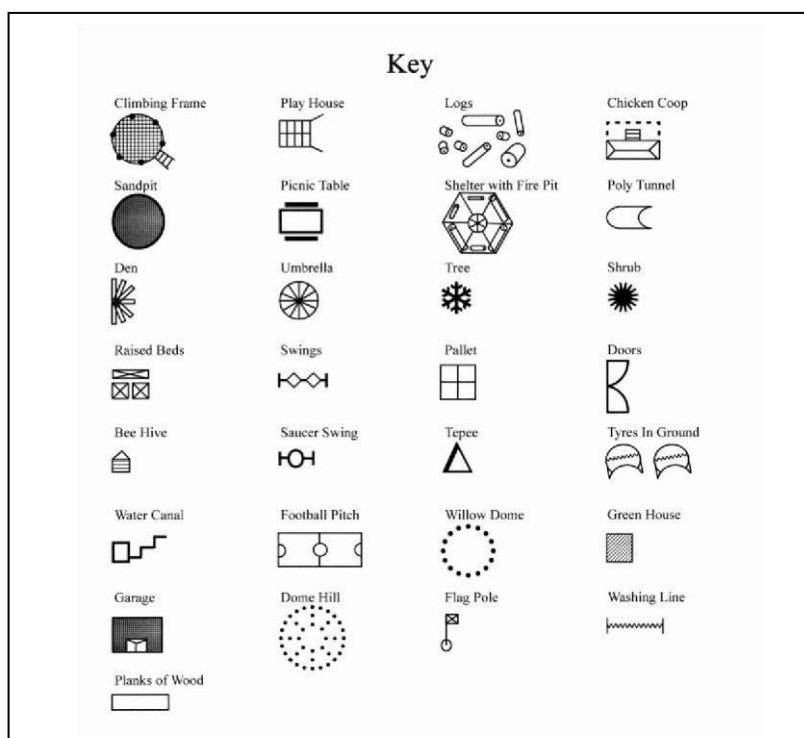
Figure 4.2. Key to Forest Kindergarten Map.

4.2.2 Routine

Observation showed the daily routine, and each day followed a similar pattern. The start of the day was loosely structured, the children arrived off the coach and deposited their belongings in the cloakroom and used the toilet if needed. This was followed by a 'gathering' or 'gather-in', with the children sitting inside on the carpeted area. Erika, the lead pedagogue used an I-pad to check the children in. She then selected children to share their news and asked each child 'What are you going to do today?'. Typical responses from the children included a place to play such as the house, a friend they were going to play with or an activity such as football or climbing trees. Erika explains that most children have a '*set play*' or '*regular places they like to go or things they like to do*'. After everyone had made their plans the children went into the cloakroom, where depending on the weather they put on coats, and collected items from their baskets, such as sticks then went outside. Palle, another pedagogue put some fruit and water outside on a wooden picnic table, which was available all morning. Lunch was cooked on the premises and served daily at approximately 11.30 am. A gong was used to signal to children when lunch was ready. The three groups ate separately around a table inside. A snack was available on the picnic table from about 2pm. A gong was also used to signal the end of the

day, and everyone went inside, collected their belongings and returned to Copenhagen on the coach at approximately 4pm.

4.2.3 Resources

How pedagogues use resources is integral to their construction of Forest Kindergarten and significant for this study. During my visits I noted in my journal that '*equipment seemed missing*' and there was a '*lack of resources'*. I explored this idea further when interviewing Erika and asked her about toys and equipment. She said, '*we initiate the learning with the nature not with the toys'*, and children '*through creativity make their own way and make up their own mind'*. She explained that it is important to encourage children to '*find the resources they need when they need them*', so the motivation is '*coming from the child'*, encouraging children to make or find things for themselves and in the process become self-sufficient and that play is open ended (Bruce, 1991). When '*resources that have been selected by pedagogues and associated with a specific activity that structure kills your creativity'*, whereas '*here we all have the ability to use our creativity as much as we want*'.

The use of '*natural materials'* is important and thought to encourage children to be *'creative and imaginative in their use of natural items found in their environment'*. For example, sticks and stones to represent items for play such as phones is mentioned in interview by Erika,

left in this great environment it's what's inside you and they just want to explore, it motivates them to be open to learning this way they actually feel it ... like a response to being in the nature, outside'.

As a result of not providing resources or activities, the physical and mental space is not codified by pedagogues with toys, so learning evolves rather than being predetermined with an educational outcome (Wood, 2010). Therefore, the outside environment becomes the main resource rather than a bare space as I first thought. It is a blank canvass waiting for children to use it how they choose, encouraged, and supported by pedagogues, for free play (Wood, 2013). An example can be seen in Marc's whittling activity (Section 4.3.1).

4.2.4 Not Tidying up

During my visits I noticed that there '*was no tidying up or tidy up time at lunch time or at the end of the day*'. Images 4.2 and 4.3 below show resources left in a range of locations during lunch and at the end of the day. When asked Erika acknowledged

in some people's eyes it would be really messy but in our eye's it's creating and they are just returning.

I also considered that leaving toys around could be '*dangerous*' although Erika reassured me that:

If something is in the way then we may ask them to move it, but we think that the play or game should continue because we don't know if they have finished and they may go back to it and continue in some way if we leave it there for them to return to, 'it's a decision we made, something that we don't do

Image 4.2. The sand box (with resources left for the children to return and continue and play with again after lunch or tomorrow).

Image 4.3. A den (Erika says *'dens were made last week as a project and left for children to return to').*

Erika made a link between the complex and invisible process and nature of play, in their decision not to tidy up:

we do not know what these children are thinking, we can only think that we know and they are so absorbed in their games and learning that they will want to return to it after lunch and carry on with their game or whatever they are trying to do, if we stop them and make them put everything away they will have to start all over again from the beginning not carry on in their play and their thinking.

For example, when the children wanted the knives for whittling (Section 4.3.1), they went away and collected them from where they were stored, used them, and when they had finished using them they returned them.

Erika also eluded to tidying up as a '*waste*' of '*valuable playing time'*, which in this context feels like a philosophical or pedagogical viewpoint,

our decision is that you ruin more than you help [children can be] in the middle of something, they might want to come back to it for next steps and deal with it tomorrow, sometimes they come back later, they remember it and return to it.

when some of it's good and they do great things and it absorbs then and them sometimes they go back to the playhouse and they'll be like ooohh I forgot about that.

the next day it's all there again but sometimes they have started something and made something like built in the sand where you've just seen or out in the forest somewhere, but the thing we don't know is we just don't know what it could be, they have used something, adapted it for their game or their play and I don't know what the game is but they do and that's important and that they're creative and we recognise that.

Encouraging children to locate resources as they need them and put them away, is characteristic of free play (Wood, 2010). Whilst pedagogues are not setting up activities or resources, which means that there are not lots of resources lying around to tidy-up or put away. Resources that are used by children as part of an activity are left by pedagogues, giving children the freedom and control to return to it if they choose, reinforcing the child-initiated nature of play (Pellegrini, 1991). When considered in relation to how Forest Kindergarten is planned, alongside the repeating nature of children's play explored later this begins to build into a bigger picture and understanding of the pedagogy of Forest Kindergarten.

However, it is important to remember that children spend all day every day at Forest Kindergarten, with plenty of time and opportunity to return and repeat, also seen in later examples. Erika's interpretation of children returning to favourite places reinforced the idea of the environment as a '*dynamic living place'* that takes '*shape as children inhabit it'* and where

play is not static but fluid and evolving as it flows across time and through space… someone else will carry on with whatever it is or it just gets left, then it becomes part of another game at another time, things just happen we don't worry about it it's just the way it is.

From my observation it seemed that rather than a predetermined placement of resources by pedagogues as in adult directed play (Wood, 2013), there was a natural movement of objects as children used them,

4.3 Planning

Observation of the 15-minute planning meeting showed pedagogues discussing ideas for the following week. Erika explained that they have made a '*decision not to plan activities'* and '*even though we have the plans from the government here the children are making the curriculum as we go'*. However, '*projects or housekeeping jobs like the bees'* are '*written here*

on the board' (Image 4.4), as a '*reminder*' of their ideas or intentions. The use of a white board that can be erased suggests that '*everything is flexible'*.
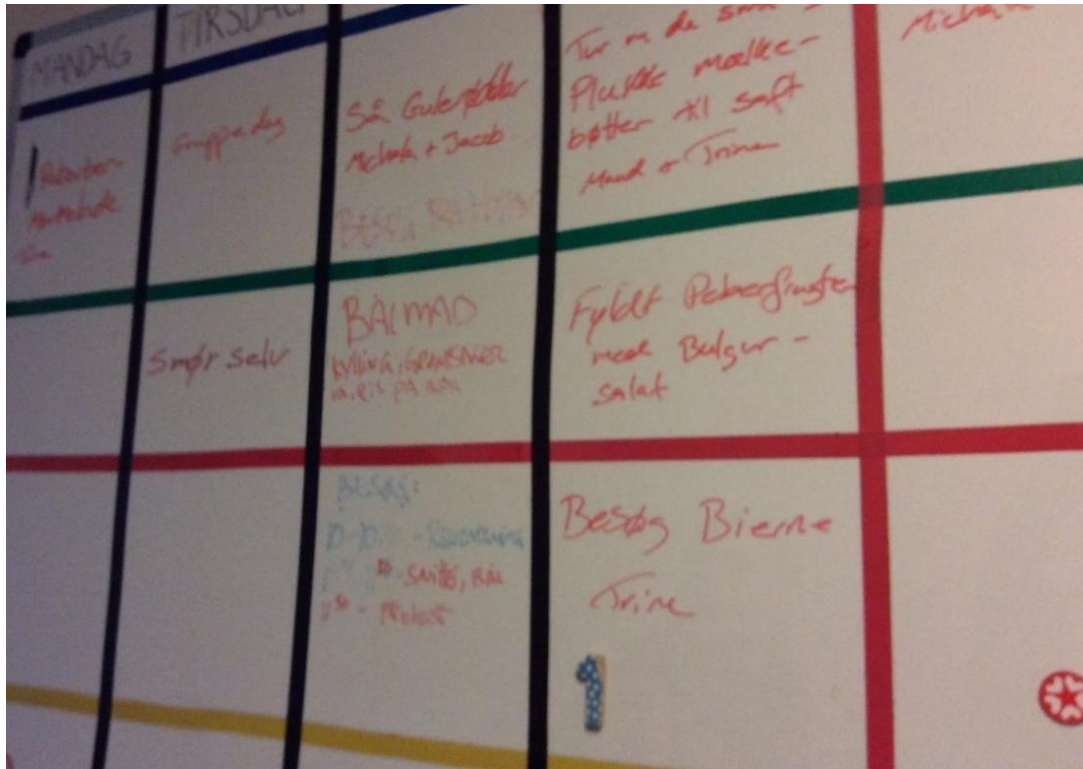
Image 4.4. Planning notes on the white board (in Danish).

The government guidelines in The Day Care Act (MSA., 2014), includes the aspect of '*nature and natural phenomenon'*, and is mentioned in the Kindergarten's policy document (2015, p.2):

learn to enjoy nature wonder and joy of the seasons and to use imagination in play with nature wind, weather and season cannot be planned, so we take natures offer that day with a structural space that can enable us to work spontaneously and use nature judiciously.

Erika confirmed this saying '*we follow the seasons and the year'* and the '*rhythm of nature that continuously generates new, interesting events'*. Weather can be unpredictable and difficult to plan around, so is an important consideration when playing outside with young children. However, the flexibility comes from pedagogues and children embracing the unpredictable nature of the outside environment. It is the structural space and how it is constructed and operated in that is of interest to this study.

Erika justified not planning activities as Forest Kindergarten is about '*free play'* saying '*what is free play because you can't exactly put words on it* [and it's] *difficult to plan for'*. Advocating for free play Erika said, '*here the children are making the curriculum'*. She appeared to be

saying that she knows or trusts that the children will create and manage their own activities and learning experiences, a main characteristic of free play (Meckley, 2002). Expanding she said children '*play*' through '*routine tasks and planned projects*' that '*have purpose*' and are '*meaningfu*l' so that children are '*engaged and involved*'. However, using everyday tasks to motivate children suggests some amount of forethought if not preparation or planning, so not everything is spontaneous, rather free play is loosely controlled (Pellegrini, 1991).

Further Erika identified the pedagogue role and pedagogy, alongside the environment as significant aspects of Forest Kindergarten:

as a pedagogue we help them to make the learning… it is the pedagogy, the environment and the children and the relationship between that create the learning. it's the pedagogy that's important…it may sound kinda unstructured…we're controlling them kinda loosely it's just not that restricted, rigid way of controlling them that is draining …structure kills your creativity [so] *here we all have the ability to use our creativity as much as we want.*

Taken alongside the 'structural space' mentioned earlier there seems to be more control than initially thought. Interestingly, both elements of pedagogy and space or the environment are individually constructed by pedagogues and have specific significance in the process of learning, rather than through learning outcomes and educational priorities (Wood, 2013). So, what emerges as important is the degree of structure and control that the pedagogues have in Forest Kindergarten, which creates a specific experience for children. Marc's housekeeping task gives an insight into how an activity comes about.

4.3.1 Marc's Activity

Marc suggested that I went with him when he cut down the overhanging branches of a tree, as he had wanted to do it '*sometime this week*'. This was not a planned project but rather an example of an everyday task related to the environment that evolved into a learning experience.

Image 4.5. Marc cutting branches for children to whittle.

As Marc started to cut down the overhanging branches of a tree two children came over to watch him and started asking questions *'What are you doing? Why are you doing that?'*. Marc explained he had to '*cut down the branches because they are dangerous and hanging down too low'*. The children continued to watch as he cut the branches down into smaller pieces putting them in a pile (Image 4.5). The children drifted off, but a few minutes later they returned with knives, and they sat down with a branch and a knife and started to whittle. Marc explained:

we just start doing something and the children may come over we don't go out to get them if they want to come they will they're usually just interested in what we're doing and they want to help and they join in

Although Marc was still cutting down the remaining branches, he moved over to where the children sat whittling at the picnic tables and joined them (Image 4.6).

Image 4.6 Marc sitting with the group watching them whittle.

When watching, it was evident from the children's faces that they were '*involved and absorbed in what they are doing*' (Image 4.6). Marc pointed out:

I don't know what they are all doing but they have a purpose to them its meaningful for ..to them [they are] engaged and involved…if they don't end up doing what they thought that's OK it's not about end-product, it's about relation to other things and the things you learn in the process that's important it's the thinking and the feeling that's important.

Although loosely planned the whittling activity emerged from Marc's job, and he did not need to encourage children to participate, rather the children's innate curiosity seems to result in the children initiating the play and drive their activity (Jarvis, Brock and Brown, 2014), as the children demonstrated choice and control over their involvement in the activity (Wood, 2010). Marc explained to me that the activity is not about an '*end product'* rather it is about the children being '*involved*' and '*engaged*' so it's the '*thinking and feeling that's important'*. Significantly, although the original activity came from the adult's purpose to cut down a few branches, for the child their '*purpose*' came from them, their need or desire to do the activity rather than from the pedagogue. As the children have initiated this activity it was not planned by Marc and there was no intended educational outcome, rather the children set their own learning agenda (Wood, 2013).

Marc's focus was on the children's engagement and involvement, as opposed to controlling and managing learning with planned and prescribed activities and tasks. Even though Marc's housekeeping job was loosely planned, the initiation of his activity sparked the children's interest and motivated them to do some whittling, which was clearly child-initiated as it was child motivated (Meckley, 2002). Marc's behaviour and his interactions with the children, as well as the children's behaviour and their interactions with each other seem significant and are looked at in more depth next.

4.3.2 Interactions between a pedagogue and children

As identified earlier it seems significant that activities are child-initiated and not previously planned by a pedagogue with an educational outcome (Wood, 2010). Additionally, this observation shows a close social dynamic developing between children and between the children and Marc, through activity related social interactions (Image 4.7).

Image 4.7. Marc and children whittling around the table.

Image 4.8. Four children whittling sticks.

Image 4.9. Children watching each other as they whittle sticks.

Images 4.8 and 4.9 show the children standing around the picnic table. Although they appear to be a group, the children were not working together as a team as each child was whittling their own stick. Each child had their own skill level although they are sharing in a similar experience. The children were engrossed in their activity, and chatted to each other and Marc, not always about the task but other things the children were interested in, such as football.

Occasionally the children glanced up from their whittling and over at Marc watching him, then copying his whittling action and technique. Marc whittled and sat as a member of the group, both modelling and observing the children (Chi, 1996), but not controlling the activity. He occasionally contributed by saying a few words or responded directly and sensitively to the individual needs of a specific child. By not questioning or interrupting, Marc's behaviour indicates that he does not have an agenda, rather he and the children are co-constructing the experience between them (Jordan, 2008).

If they could not see Marc some children looked over at one of the more skilled children around the table. Two boys stood out as 'experts' as most of the others watched them at different times before returning to their own stick to try again. As the expert does not have an agenda, they are not intentionally teaching (Jordan, 2008), and so is not scaffolding (Bruner, 1976). Although this behaviour could generate a skill hierarchy between expert whittlers and novices, it did not appear to as the children were able to support each other jointly problem solve, as a co-construction through an intersubjective shared understanding because of the symmetrical power balance which is empowering for the children (Jordan, 2008).

Marc's understanding and knowledge of the children could be seen in his skilled interactions with them, as he used his previous experience of similar situations to inform his view of the current situation and his decision on whether or not to intervene, if at all. Marc gave the children time and space to work independently and try things out for themselves at their own pace and to self-manage, knowing that help was not far away. Marc's way of working, through warm and trusting relationships develops a two-way intersubjectivity (Jordan, 2008) through which he can support and guide children from a distance, to assess the situation for themselves, as a co-construction (Jordan, 2008). Although Marc inhabited the same space as the children, he did not seem to dominate the space. For example, interactions were equally balanced between the pedagogue and child, and did not seem dictated or dominated by Marc, demonstrating an almost parallel, reciprocal relationship (Vygotsky, 1978), where the experience is jointly constructed *with* children (Jordan, 2008). Erika explained:

sometimes we go parallel with them (children) sometimes we are a little in front, sometimes we go a little behind and let them experiment but we are there for them…and we don't always know what's going to happen.

Marc's co-constructing approach seems to develop from the equal relationship and the intersubjectivity between the children and Marc that empowers the children (Jordan, 2008). The dynamic created provides security for the children, where the child's expertise is valued, while simultaneously offering a buffer between being totally on their own, allowing for higher order thinking to develop (Jordan, 2008).

4.4 Children's experiences

For this study three child participants took part, and Danish pseudonyms have been used Anneka, Luca and Oska to protect their identity. However, during the observations it was difficult to separate Anneka from her group of 6 girls who call themselves the fairy girls, and Oskar from his group of boys that I have named the sand boys. As a result, the groups became the cases, while Luca remained a case on his own.

Name	Photo
Anneka and the fairy girls Anneka is three years and ten months old she plays in the *legehus* with the fairy girls.	 Image 4.11 The fairy girls. Anneka is in the back row second from the right
Oska and the sand boys Oska is 3 years and 10 months old. During the photo tour Oska chose the legehus and the sand box as his '*best place'*.	 Image 4.12 The sand boys. Oska has dark hair and is on the right.
Luca Luca is the third child participant he is 4 years old and likes '*climbing trees and the climbing frame…on my own or with friends'*.	 Image 4.13 Luca climbing his favourite tree

Table 4.1. The child participants, Forest Kindergarten.

4.4.1 The Danish *legehus*

The *legehus* or playhouse was selected during the photo tours by Anneka and Oska as their '*favourite place*' to play, but for different reasons. Anneka said the '*fairy girls play families or mums and babies…away from the others, there are lots of houses here…I always play mums and babies in this one because it's the best, I can't say why it just is*'. Oska chose it because '*this is where we play super-heroes*'.

The map (Figure 4.1) and key (Figure 4.2) shows two playhouses situated side by side close to the perimeter fence and the aerial photo (Image 4.1) shows the trees creating an overhead canopy that provides shade. Dense bushes provided additional secluded and private places to play behind the *legehus* (Image 4.10). Both made the inside dark as there are no windows, a narrow entrance but no door (Image 4.10). During the week Anneka and Oska were observed playing in and around the *legehus*, revealing that it is used in different ways, by different children at different times, with some repetitive elements. How the focus children and their respective groups used and occupied the space and their interactions with one another, is explored in more detail next.

Image 4.10. The *legehus* (under the trees near the perimeter fence, also showing the dark space behind).

4.4.2 Set Plays

Erika explained that learning through play can seem '*unstructured and unpredictable*' as it can be '*difficult to know what children are thinking*'. Although she identified that most children have:

regular places they like to go or things they like to do, *games they play in places they like to play*, *places they go back to again and again on and off*, *for a favourite game or play.*

From her explanation, it is possible to identify different types of repeating *set play*. For example, some games can be played anywhere as it is the story of the play that is important. Some play is associated to a certain place that could relate to its quality like climbing, while some places lend themselves to different kind of play such as the house. Sometimes it is both the place and the play together that are significant. Although this study did not have the time to observe children repeating play Erika's explanation is a useful way to understand how she sees the children playing and to identify patterns in the play observed her from her perspective. The different types of set play have been used here to explain some examples of play seen in this study.

4.4.2.1 The importance of narrative

Sometimes it can be the narrative or the story of the play that is the most important aspect that is repeated and seems to drive the play. Erika explained '*the game can be played anywhere maybe down in a bush or a tree it's the play that is important*'. Narrative driven play is portable and flexible and can be played in different places within the space available. Anneka offered an example saying we '*play mums and babies in all places, different places, sometimes the house*'. Through repetition the narrative becomes well used and familiar while the use of particular props or objects become significant to the play, for example, Erika said:

the game can be played anywhere maybe down in a bush as long as you have got all the sticks that are your babies or their mobile phones.

The story or narrative of the *set play* is the constant feature. Repeating the narrative offers a familiarity that can also adapt organically to cope with any differences at the time such as weather or seasons, who is playing and even the place. From the safe place of the narrative the children had the ability to branch out and explore other places to play the same game, adapting the narrative to suit the circumstances.

At the start of the play both the fairy girls (Image 4.11) and sand boys (Image 4.12) were observed moving objects in and out of the house. In addition, special objects or props were searched for, found, and moved to a new location as they became integral to the play. For example, at the start of their play the girls searched for the chalk to visibly mark the outside of the house. Then as part of their role as mums they transformed the inside of the *legehus*, like staging a theatre set with the table and objects on it. The boys similarly occupied the *legehus* but played a different game. The sand boys removed items such as the table, then, they dragged logs and branches inside and piled them up across the doorway (Image 4.12). Later they dragged a metal football goal across the doorway, blocked it to prevent anyone coming in or out, although Erika intervened at this point for safety reasons.

Image 4.11. The fairy girls moving logs and unwanted items out of the house.

Image 4.12. The sand boys standing on their pile of logs and branches.

The sand boys use of props showed they had transformed the space for their own purpose, indicating control over the props, the play, as well as the space, resulted in more meaningful play (Vygotsky, 1978). Whilst the objects became part of the narrative of the play and gave meaning to the space, which could be different to the meaning and purpose ascribed by adults.

In occupying the space of the *legehus* the children made their own rules for the place, which Parten (1932) identifies in children 6 and over. While Vygotsky (1978) suggests that rule making by children indicates advanced play, whilst the play was clearly related to the roles they had adopted or were assigned as part of the play happening there. setting out the parameters of the play (Jordan, 2008). For the sand boys play ownership and control of tools seemed important to their sand play, and key to child-initiated play (Jordan, 2008). At the start of their sand play they searched for tools, then when he went for water Soren asked Oska to *'look after my rake'*. When Oska left the sand box he took *his* spade with him. It could be that the quality of the tool related to the skill and ability to produce good digging and good tunnels. During the

observation there seemed to be a hierarchy among the boys, which could be related to either ability or the tool each boy had, as both were closely related, although this is difficult to determine, and would require further, more detailed research. In addition, the boys used their physical presence to occupy and dominate the available space.

Both the fairy girls and the sand boys were seen to use their physical presence inside the *legehus* to control who came in or out of the door. This physical presence signalled to others, alongside the blockade of logs provided by the boys that this was occupied territory, and there is little point in trying to invade this space (Image 4.12). The boys maintained their presence by strategically taking it in turns to go off and find logs and branches from other places, but always leaving one child behind to physically occupy the space.

The skill with which both groups performed this activity, suggested that this is something they have practised and done many times before, and part of a repeating pattern of behaviour. All their actions were part of a transformation, occupation, and codification of the place as part of the process of controlling and making the space their own. The use of props and physical occupation to gain control of the space seemed integral to their routine and an almost ritualistic element of their play, and also linked to the social interactions and the different roles assigned within the group and essential elements of child-initiated, free play (Wood, 2010).

4.4.2.2 The importance of place

For some play the place afforded a quality that was essential to the play, for example, the sand. Erika said, '*they want to play the set game in that same place*' they *'always dig tunnels like that …it's part of their set -play'*. Erika identified that the same children frequently played in the same places identifying the repetitive nature of children's play (Vygotsky, 1978; Bruce, 1991). For example, when the sand boys were digging tunnels in the sand box, they returned and repeated the same play. Similarly, when the Fairy Girls decided to play fairies, they went to the fairy bush. Confirming what Erika told me Anneka said the,

fairy game [can] *only be played in fairy bush, fairies has to be in this special place…away from others …we always play fairies there* [because the] *fairy tree is good for climbing…I don't play it anywhere else'* (Image 4.13).

While observing the fairy girls and sand boys I noticed that both groups also assigned a play narrative to a specific place, which then changed according to the place. The sand boys dug tunnels in the sand box, then as they moved to play in the *legehus* the play transformed into superheroes. The rules of the play changed relative to the different place and corresponded to the play story.

As the children performed a different play in a different place the rules adapted to suit the place and the narrative. Luca suggested that sometimes they decide to '*play a favourite game such as pirates ...we go to the pirate place*' (Image 4.14). This indicates that deciding which game to play comes first, then they go to the best place for that game. The play was also associated with a place because of its affordance and is then assigned meaning by the children who play that game there.

Image 4.13 Anneka and the special fairy bush.

Image 4.14 The pirate ship where Luca plays pirates.

Erika knows the *legehus* (Image 4.15) is popular '*with younger children who have not been coming for long*' as they focus on a specific place, suggesting the '*familiarity with the place is important it makes them more confident*'. Sometimes a specific place can become a constant feature of their play. Although she also recognised that:

some of the girls are more particular, they are the older girls and they always play with those things in the same place.

Choices by both groups could be related to an established routine, habit or even an emotional connection or attachment to a specific place. For example, Luca identified a specific tree that was easy to climb and has personal meaning for him. While Oska told me that if his favourite place was '*busy*' he went '*somewhere else*', '*we play the best game in that place, climbing trees or the climbing frame*'.

Image 4.15 The *legehus* with resources inside.

Similarly, Anneka said if '*our special place is busy we don't play there' [we] go somewhere else'.* Although I did not observe this happening Erika confirmed

sometimes even when others are there, they go off somewhere else to play the same game, if someone is playing in their place where they want to be, they just go off and move elsewhere.

Alternatively, by going elsewhere the children might have to play a different game that is more appropriate to the affordance of that location, revealing an element of flexibility and adaptability of both play and place, which are main characteristics of child-initiated play (Wood, 2010). However, because of time limitations this was not observed.

To sum up, the pedagogue's way of working or pedagogy, allows the children choice and control over their play, giving the play personal meaning and significance, resulting in children who were immersed and absorbed in their play. Free play or child-initiated play was encouraged through the pedagogue's behaviours, for example they were not seen imposing rules or an educational outcome (Wood, 2010). Even though the environment has been loosely constructed by the pedagogues, the children had freedom within the adult imposed boundaries

to create their own rules and limitations and were beginning to show ways of self-regulating. Whilst small elements of their play or the environment may change, there were still constants to provide security, such as friends, narrative or play stories and places. By repeating play or revisiting familiar places the children were working from a secure base that gave them confidence in their own ability from which to extend their creative thinking, and push their personal boundaries further still, for example searching for the elusive log or climbing up that favourite tree using a different route.

4.4.3 Social Interactions among children

The observations of Marc and the children, for example the fairy girls and the sand boys have shown that the children operate in groups. Exploring this further seems to be important for this study and is looked at here.

4.4.3.1 Mums and babies

Naming themselves the fairy girls they are identifying themselves as a group, Anneka told me '*we play mums and babies*' which Erika confirmed '*most days'*. However, the group of 6 separated quite early on into 2 sub-groups, the mums and the babies. Within the play, the roles assigned were associated with their age and the place where each are playing, inside or outside of the *legehus*. For example, the mums are the older girls who played inside the *legehus,* moving props and '*tidying*' while the babies were the younger girls who played outside the house, '*chalking the walls'*. Assigning roles in this way, with joint agreement over the development of the play story is part of associative play, whilst co-operative, group play is seen by Parten (1932) as the highest level of social play. Within their group the girls created and consented to their own social hierarchy, as the two sub-groups functioned independently with different tasks in different places. Yet each still identified as part of the whole fairy girl group. The status quo was maintained until the babies tried to enter the *legehus*, but were prevented by the mums, who positioned themselves as the gatekeepers of the *legehus*. This caused a visible split. The babies asserted themselves which threatened the position of the mums and resulted in the babies leaving to be '*fairies in the fairy bush'* (Image 4.13). Vygotsky (1978) acknowledges that social interactions, such as those seen here are central to learning, with children learning about themselves and others through the play context (Garvey, 1990). Further exploration can be observed in the children's negotiation of roles and interpreted as part of the play process through which children set the boundaries of their play (Jordan, 2008).

4.4.3.2 Digging tunnels

The sand boys also had their own identity that related to both place and activity, and they worked together as a group purposefully constructing a complex tunnel (Image 4.16). Under closer scrutiny there seemed to be a mix of individual and paired working that contributed to the *group* co-operative play (Parten, 1932). It was difficult to know if each boy or pair were working parallel to each other on an individual section or together as part of a bigger more complex set of tunnels (Parten, 1932). As they dug the boys chatted to each other about what they were doing, for example Oska said '*look at my tunnel'*. When Oska left the sand for water he asked Soren to '*look after my spade'*. There were also times when the group seemed to work together to hide the bucket, and patting water on the sides of the tunnel and intricate bridge they were constructing (Image 4.16). The task sharing, discussion, negotiation over equipment and helping each other suggested an element of cooperation, group cohesion and self-management relating to co-operative play (Parten, 1932).

Tools were also an integral part of the sand boys play, for example, Oska told me it is '*important… to dig tunnels in the sand box'*. Control of a tool was also related to skill level and position within the group. For example, Oska had an important role in the group as he made decisions and had the '*the best tool'*. He was also skilled at digging and sculpting the tunnels. All three attributes gave him status in group, indicative of a social hierarchy.

Image 4.16 The sand boys working together to dig tunnels.

During the observation an 'outsider' came over. He looked, spoke, and went to step in and join the play. The boys foot accidentally damaged the tunnel and bridge that they boys had spent a lot of time over. Oska took control, maybe as the leader but also as a gatekeeper, he confronted the outsider then the other boys joined in, and the outsider left. This incident created an opportunity where the boys came together and bonded as a group, asserting their authority over the space. Whilst generating a sense camaraderie through the shared experience to talk about later.

For both the fairy girls and sand boys being part of a group offered an element of security, particularly to younger children, and protection of their territory and safety from others invading their space or threatening their play through the personal and collective responsibility of groups members. It could be that the groups, as we saw earlier were repeating 'set-plays', patterns of behaviour or rehearsing (Bruce, 1991). However, this is difficult to determine from the data available. Even if this was the case the children are still learning to co-operate, for example, Oska showed me how to '*do it like this'*. The boys were also working together, sometimes on their own patch, and sometimes alongside others, functioning as part of a group, and resolving issues or negotiating as we saw above features identified by Vygotsky (1978) and Parten (1932) as integral elements of cooperative, social group play.

During the observations, the only pedagogue interruption or intervention was when Erika considered it too dangerous when the boys dragged the football goal across the doorway of the *legehus*, on top of the branches and tried to climb over. By applying a watch and wait approach and not intervening or interrupting unless it was necessary because of safety, both Erika and Marc gave the children time and space to try things out for themselves, and is interpreted as their way of creating and maintaining an environment that was conducive to free or child-initiated play (Wood, 2010).

4.5 Summary

The data has established that the outside environment is a springboard for child-initiated play. Constructed by the pedagogues as both a physical and mental space for children that motivates them to play *in*, *with* and *through* nature, the pedagogues were not seen initiating activities, and only plan extended projects and everyday tasks, which provides a loose framework. Preferring

to observe from a distance and to support the children with minimal intervention or supervision like Marc, the pedagogue's behaviour allows children valuable time and space to initiate their own play and activities such as practise a skill, return to favourite and familiar places and repeat 'set play' over an extended period of time. Further the pedagogue, by listening to children, and by co-constructing experiences *with* the children generated intersubjectivity (Jordan, 2008), while at the same time giving children the opportunity to experience learning through the process of play rather than structured activities with an educational outcome. It is important to the pedagogues that children are empowered to choose to engage in the natural environment, and are motivated by their own interests, which develops their autonomy (Jordan, 2008). Further, by allowing children the time and freedom to play, find their own resources and return to activities the pedagogue is enabling children to develop control and choice in their play, resulting in play that is, on many levels child-initiated (Wood, 2010).

The repetition of children's set play creates familiarity and security from which children have the confidence to experiment and be creative in their learning. In addition, set play includes common elements such as the play narrative or story, the place, and props or equipment, through which children construct their own play worlds, with their own social structures or hierarchies that focus on group identity, roles and tasks. Membership of a group, whether play is co-operative or associative (Parten, 1932) is important for children's holistic development, particularly socially and emotionally (Vygotsky, 1978), as with very little direct input from pedagogues, the children need to learn how to resolve issues independently.

Chapter 5 - Findings from Forest School, England

5.1 Introduction

This chapter contains two sections. The first section offers background information relating to the Forest School site, for example how the space was used including the participants, any routine and explores how session are planned, including the role of practitioners, focus activities and continuous provision. The second section presents the findings from data collected through photo tours, interview, and observation of children. The headings used are broadly similar to the Danish case with some variation because of the nature of the data.

5.2 Background

The site of the English case was a nursery school situated near a large city in the East Midlands, England. The nursery school has a head teacher with three qualified teachers one per class, each with either a B. Ed or B.A.(hons) undergraduate degree (level 6), and eight teaching assistants each with a level 3 BTEC childcare qualification equivalent to 3 A' Levels. The FSA recognise this setting as a Forest School because all the staff have participated in a minimum of Forest School training, and consequently they refer to their practice as Forest School. As part of a whole school initiative all teachers and teaching assistants have had Forest School training at least to level 2, which involved a day course led by a Forest School trainer that included health and safety and Forest School pedagogy. The state funded nursery school has approximately 150 children on roll, aged between 3-5 years divided into 3 nursery classes, rabbits, caterpillars and ladybirds, with pupil numbers capped to 25 for each nursery session, morning, and afternoon. The nursery week is split into ten sessions, each lasting 3 hours, and children can attend a maximum of 5 morning or afternoon sessions out of 10 per week. The adults and children of Ladybird class agreed to participate in this study. This study is only interested what the school refer to as the Forest School session, which happened in addition to usual practice, as part of the three-hour session on Thursday mornings. Each session involved 5 early years professionals. Kim, Tom, and Bev (all participants have been given pseudonyms) and two others not featured in the study.

Kim, the class teacher, is the main participant, Tom was observed carrying out a planned activity, and Bev who featured as part of Joe's observation and two other practitioners. Kim has had separate Forest School training to level 3. For the purpose of this study the term practitioner will be used to refer to all early years professionals in this context.

5.2.1 Outside space

The nursery building (marked in red on Image 5.1) is a single storey construction built in the 1970's. The surrounding area is a mix of privately owned and local authority residential housing. The nearest wood or forest is a bus journey away. The nursery school has an outside play area that had recently been developed and landscaped and is easily accessed by all 3 classes, who share this space during all the nursery sessions. Forest School happened in a separate 'L' shaped, gated outdoor space at the end of the nursery building, marked in yellow on Image 5.1.

Image 5.1. Aerial view of Forest School. The red area is the building and the yellow area shows the area where Forest School takes place.

Previously an unused space, that was repurposed it is now used solely for Forest School. Figure 5.1 and the key (Figure 5.2) show the location of 6 trees and a variety of shrubs as well as the location of fixed play equipment including a small climbing frame, a shed used as playhouse, a mud kitchen, a sand box, benches made from tree trunks, large tractor tyres and a selection of shrubs, bushes, raised beds and a small pond (Figure 5.2). Other portable smaller resources and equipment such as buckets, sticks, and bricks are made available for each session, by the practitioners but are not visible on the map.
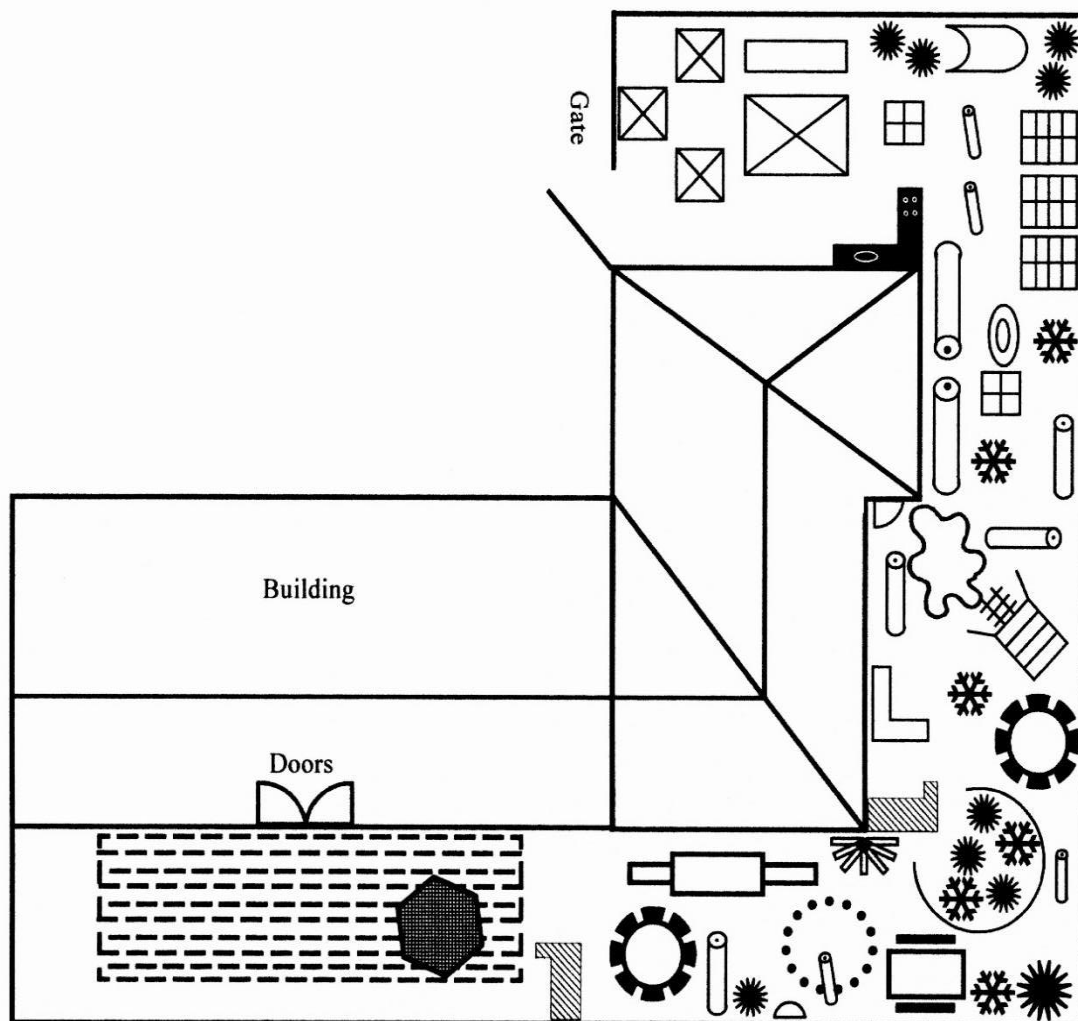
Figure 5.1. Map of Forest School.
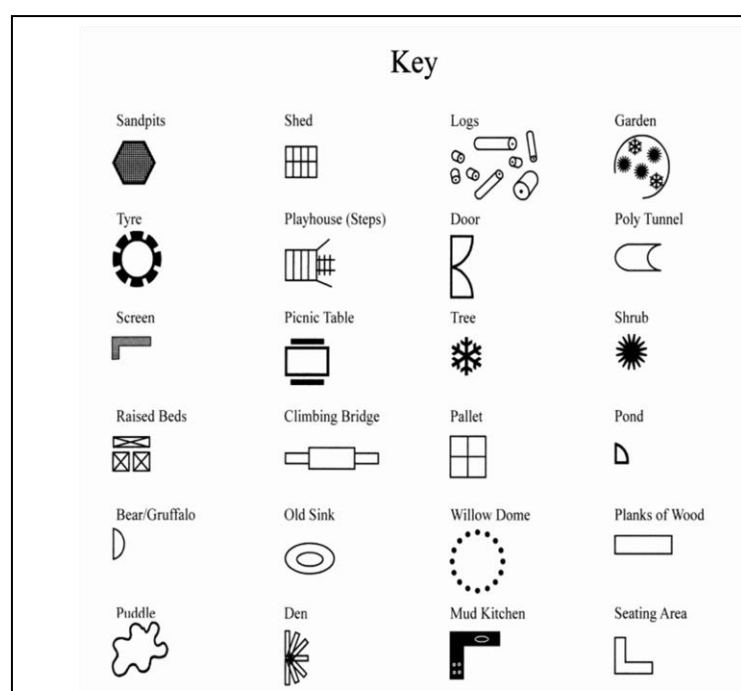
Figure 5.2. Key for Forest School map.

5.2.2 Routine

As Forest School happens weekly, data collection took place every Thursday morning for five weeks. Observation showed that each morning followed a similar pattern. The children arrived in the classroom after 8.45am, where they played until about 9.00am. Then Kim directed them to sit in a circle on the carpeted area where a register was taken, while they had a drink and snack. On one occasion the children had snack during Forest School. Kim selected children in pairs to put on their coats and boots, they then lined up at the door. Ladybird class with the 5 practitioners then walked over to the designated Forest School area. Before the children arrive in Forest School, the practitioners used the planning (Image 5.2) to set up resources and activities and identify their role for the Forest School session.

Image 5.2. An example of Forest School planning (Forest School activities are shaded green with the practitioner names redacted).

In Forest School the children sat in a circle and Kim talked about the '*rules of Forest School'*, for example, *'no running'* and *'be kind to each other'*. She then explained the resources and activities available, including the practitioners who were responsible for a focused task. Individual children then chose where they were going to play. At approximately 11:45 the end of the session was signalled when practitioners called out *'tidy up'* and started to put everything away. Kim said, '*I think the best practice is to take it all down so you're not leaving anything for them to injure themselves on'*. As other classes (rabbits and caterpillars) use the Forest School space there was an agreement to tidy away the portable resources and activities such as painting and puzzles. Each session is new to each class. Just before 12 o'clock the children were ready to return to the classroom for lunch or to go home.

5.3 Planning

Kim explained that they '*do'* Forest School for

one session a week …sometimes more in the summer [although] *at the start of the year because we have free-flow they slowly come out in dribs and drabs in small groups for short periods of time so that it's not too much [we] build it up in that way so there are no big expectations, then they get comfortable and easy with it, they know what's going to happen.*

This gradual introduction to Forest School is because Kim has noticed that the children '*do not have a lot of experience of playing outside'*. For the children to become *'familiar and confident with their surroundings'* she structures Forest School sessions at the beginning of the programme with a routine (see Section 5.2.2) and planned activities, although Kim mentions Forest school is about '*process and not the end-product'*. Explaining they plan '*different activities every week'*, '*just like we would usual activities'* in our '*weekly planning meetings'*, Kim shows me that the Forest School activities are shaded green on the planning sheet (Image 5.2). Kim acknowledges that '*EYFS fits alongside Forest School ideas, we work with play, there's always something we can link it with… planning…and back to EYFS'*, although the planning document does not show any direct links to the key or prime areas of the EYFS (Image 5.2).

As part of usual practice, the planned activities seem central to the structure and routine Kim provides and are important to introduce the children slowly to Forest School sessions. Through the planned activities practitioners can support the children, building up from the familiar and gradually expanding the repertoire of activities as the children get used to the different kind of activities available and the outside environment. Through these new experiences, and

interactions with their natural environment, children begin to construct new knowledge (Vygotsky, 1978).

Kim sees the benefits of

doing [Forest School] *every week because they've...we've built on things each week' ... they do benefit from it being regular they get the repetition... they get to know when they are going outside to do Forest School.*

Recognising that '*children have different needs'* and preferences, so we '*link our planning and our activities to the child's development'*. This could be because '*playing outside is different to playing inside'*, and '*Forest School should be different to inside learning'.* Kim also wants the children

'to enjoy it on their levels and experience what they can and what is appropriate ...sometimes it's just about being outside and being in a different environment'.

However, acknowledging the freedom Forest School offers, Kim says

I don't always feel that I need to have in depth plans, we can say OK we'll do that around a story, perhaps it'll be more open-ended, I do think we can go round there without any focus and the children will always learn,

However, the planning and provision of activities with a learning focus such as those seen in this study, indicates there is more adult managed play, and less '*free flow*' or child-initiated play (Wood, 2013).

An emphasis in the EYFS (DfES, 2007, p.11) on providing "planned and purposeful play" could account for planning in this way, while the discrepancy around free flow play is understandable given the emphasis on an educational outcome agenda in the same curriculum document (Wood, 2013), creating a tension between the rhetoric and reality of play (Bennett, Wood and Rogers, 1997; Wood, 2010). Planning seems to address both the need for educational outcomes through adult focus activities as well as more playful activities, some that children do independently from adults as continuous provision, which is explored in Section 5.4.

On the planning sheet (Image 5.2), although redacted, practitioner names are frequently linked to activities. Observation revealed the adult role was central to continuous provision and is looked at next, while a specific adult focus activity is explored in more depth in Section 5.5.

5.4 Continuous provision

Continuous provision was a term used by Kim to refer to what she calls '*free flow play*' or '*child initiated play*' as planned, resource driven activities that children are involved in when they are not doing specific adult focused activities (See Section 5.5.4). Activities were also seasonal and linked to Spring and Easter. Kim explained:

continuous provision allows us to give them skills to do it with adult focus activities such as bug hunting then they will refine it with their friends or independently.

As justification for her earlier comment that '*playing outside is different to playing inside*', Kim also states that '*Forest School should be different to inside learning*' she goes further saying that

learning outside is different to learning inside [and] *children can play differently outside… some children may play with some resources inside but not outside and some will play will things outside but not inside they might do elements of it inside such as books.*

Kim gives the example that

boys sometimes look at books outside when they wouldn't do this inside…inside resources outside encourage children to explore and experiment, using equipment they wouldn't normally.

Continuous provision was not explicitly written on the plan, but Kim explained the '*outside environment or continuous provision is prepared by us*' using specific resources '*we know the children like to play with*'. For example, Kim was confident that '*most children like the puppets… resources such as puppets or books are selected*' and set out by the practitioners for the use in child-initiated activities. Although the use of props and resources in play is important for forming relationships (Vygotsky, 1978) "pure play" only occurs when children have the opportunity to freely choose the toys that they play with (Wood, 2010, p.20).

Kim's comment that the '*environment contains no resources* [as the] *trees do not have good branches for den building*' (Image 5.3), seems to be an acknowledgement that the pine trees do not provide sticks or leaves, and not that she fails to recognise the full potential of the outside environment to provide natural resources and motivate children's play, and account for the planning and placement of resources seen here as part of continuous provision. Revealing her knowledge of children's preferences, Kim goes on to say

… you might need to add a few extras…bring in sticks or things like that …'cos they love them but we don't have them like that here, so we bring them in for them.

Image 5.3 A box of sticks brought in by practitioners for children to use.

Image 5.4 A den made by children from imported sticks.

As part of the structure and support planning provides play props and resources that the children and practitioners have used many times before inside, and some that are typical Forest School resources such as sticks (Knight, 2009). Familiarity with resources could help both the children and practitioners feel safe and comfortable, especially as Kim mentioned earlier (Section 5.3) that some children may be unfamiliar with the outside space. However, by frequently selecting and using these favourite resources and play props, outcomes and play experiences may become predictable. At the start of sessions, when Forest School is new repetition and familiarity can be useful, especially when maximum input is required from practitioners to allow them the space and time to concentrate on children's immediate needs.

Continuous provision is Kim's way of providing opportunities for children to build on previous adult focus activities, while at the same time giving children the experience of an activity, resource, or ability to develop a skill using a tool independently, without limited adult support. Kim suggests that

if they have done it with us they'll be drawn to it on their own…without the practitioner…offers a different opportunity rather than an adult led experience… there are different ways of them accessing it, with or without an adult, they can assess it independently or through an adult led experience or playing with resources we have put out… it all provides an outdoor learning experience…you almost give them the skill to do it and then they refine it and explore it in different ways by returning to it themselves.

Caitlin's bug collecting (see Section 5.6.2) is an example of a child-initiated activity and as part of continuous provision (Wood, 2010), it is based on an earlier adult focus activity that children can '*access independently'* free from adult intervention (Wood, 2010). The bug poster (Image 5.5) is also a leftover from a bug hunting and identification activity. Through the adult focus activities children begin to develop preferences for their play and equipment, which they can later explore independently through continuous provision. In addition,

'they can explore and perhaps slowly change things themselves when they get the regularity'.

Kim presented the positives of this approach as it:

links to their self-esteem and that builds on their confidence because they are comfortable because they know it so well so then the learning activities should sometimes be the same because they will only learn if they are comfortable and secure.

Image 5.5 A poster from previous adult focus activity.

By planning and organising continuous provision that builds on previous focus activities Kim wants the children to '*where possible trying to get the most out of everything'.* By encouraging children to revisit favourite activities, they can then try other activities outside of their comfort zone, or ways of playing with the same resources independently or differently to how adults intended (Wood, 2010).

Kim clearly expresses her understanding of how children learn through experience and repetition, and her planning reflects this. However, the act of planning with specific outcomes in mind seems to result in more adult managed activities (Wood, 2013) and less on spontaneous play (DfEs, 2008). Even though the activities might be playful (Pyle and Danniels, 2017), and they may contain some characteristics of free play, such as choice and control they are not always "freely chosen" (Wood, 2010, p.20). The amount of freedom, choice, and control evident in play may vary between individual and context. The practitioner role is explored more next and in Section 5.5.4 where Tom's adult focus activity is looked at in depth.

5.5 Practitioner roles

During my five visits to Forest School there were 5 practitioners outside with 26 children, which worked out at approximately 1 adult to 5 children. This is much higher than the government recommendation of 1 adult to 13 children aged three years (DFE., 2013). The deployment of practitioners and their roles seems important in understanding how Forest School is interpreted by Kim and requires further investigation.

One of the reasons Kim gave for this high number of practitioners is that children struggle, '*especially with free flow play* [or] *continuous provision'*. She explained that all five '*practitioners have fixed roles relating to positions'* in the outside space. Two were responsible for '*focus activities'*, which are planned and prepared, adult-directed activities, usually positioned purposefully in clearly identified spaces or places, depending on the requirements of the activity for example, in the sand box (Section 5.5.3). The other three practitioners, without a focus activity moved about the site in clearly defined areas. Kim's deployment of practitioners in this way by Kim was confirmed by observation over the five weeks of visits.

Kim pointed out that the '*adults are observant'* and '*from here you can see everything, all that's going on'*, and she indicated one practitioner positioned in the 'L' shaped corner, see figure 5.1. The remaining two moved around and had a side each. From these positions all three adults could '*move around the outdoor space'* and '*watch out for safety issues'* while they '*manage the children'*. Skilled observation is a way of informing future activities and practice helping the practitioner to identify children's individual needs (Jordan, 2008). Having at least one adult visible at all times provided the children a secure environment. Kim says,

the most valuable resource in the room is the adult, the teacher, the facilitator to cater for the individual needs and make learning applicable

and the practitioner's main role during the session is to

intervene and support where necessary … we're always on hand to give more targeted support and help for those who need it…

An example of adult's interaction can be seen in Section 5.6.3.

The role of the adult is significant in supporting children through the process of acquiring new information, especially the active engagement through discovery and experimentation as they construct their own understanding of the world (Vygotsky, 1978). Kim says

I'm very passionate about those moments when you have learned something with them, and you've been on that journey with them and you can see them achieve something.

High adult presence could have negative results on children's play, as a defining factor of free play is minimal direct intervention from adults (Wood, 2010). Even if the purpose is to create an environment that is safe, with support from adults and related to practitioner, parents, and children's perceptions of risk. A more detailed interpretation of how practitioners perform in Forest School and their approach with regards to risk, care needs and focus activities is looked at in the sections.

5.5.1 Perception of risk

Kim suggested earlier (Section 5.5) that children may need more support from practitioners during Forest School, which could be related to a perception that the outside is '*more risky than inside*'. Even though Kim accepted that

children need risk [and risk is an] *important part of Forest School … we all view risk so differently, with that risk comes an element of safety so some people get agitated over that buddlia, I'd be more anxious about them climbing 20 foot in the air 'cos I'm not sure if I would be able to get them down…and some people get anxious about the pond, even though it's a tiny pond, whether it's safe or not to me if it [climbing] happens naturally because of that low branch it's OK.*

In the planning (Image 5.2) there is a separate section for carrying out a health and safety check, with Kim as the named person. She is carrying out her responsibility to make sure that '*Forest School is made as safe as is reasonably possible*' and to '*facilitate children's risk taking*' although as she accepts (above) that people can have different perceptions of risk. In addition, high adult to child ratios mentioned earlier (Section 5.5) may also be related to this perception of the '*unpredictable space outside*'. The strategic placement of practitioners mentioned above (Section 5.5) is therefore a way of managing or containing any potential risk.

Showing her understanding of Forest School Kim says that '*Forest School skills*' are about '*exploring the natural world outside*' while also '*learning skills for being outside and using tools*' such as '*spades*', '*hammers*' or '*saws*'. However, with the use of tools

there's an extra risk, it's unpredictable, perhaps the child, they wouldn't understand that they couldn't just run around with a saw, we talk about using real tools and real equipment, it might

surprise some parents that 3 year olds might be touching a real hammer but actually they are in a one to one situation.

Kim acknowledged that children might need extra help using real but child-sized tools, such as '*closer adult supervision*', which may account for the higher than usual adult child ratios. For example, I noted a hammer and nails focus activity that used child size hammers. Practitioners support '*children's individual needs*' and '*development on a one to one so they can adapt their approach accordingly*'. Kim's planning of adult focus activities alongside the high adult child ratios may be a way of minimising any risk.

However, there may be other reasons for high adult child ratios, for example Kim explained sometimes '*our role might be to help them engage and learn and explore for themselves*'. Being able to support children when needed is planned for through the careful placement of practitioners, mentioned by Kim in Section 5.5. Kim explains how continuous provision is supported by three practitioners who are available to move freely observing and interacting with children, as needed. Supporting children through social interaction helps with the internalisation of ideas and supports the learning process (Vygotsky, 1978).

5.5.2 Immediate care needs

For some children being outside may present more challenges as they may have '*special needs*'. Across the five visits I noted that children sought out practitioner help when they were struggling with a task, going to the toilet and when they fell, got wet or dirty. For example, Joe fell over and said to Bev '*look my hands are dirty from when I put them in the mud over there*'. Bev brushed the mud off Joe's hands and encouraged him to go back to his bench and continue playing with the puppets. Although they always have a '*first aid kit with us so that if anyone falls over or hurt themselves we can deal with it here and not have to go back*', Kim added '*we have to go back into the main building for the toilet*'. Over the five visits I did not notice toileting happening too frequently, maybe because children are encouraged to go to the toilet before Forest School or children were absorbed in their activities and are only there for approximately 2 ½ hours. However, the immediate care needs of young children or at least the possibility of a care need could in part account for both the high adult child ratios and a justification to place practitioners in strategic positions, making practitioners visible and available should children have any difficulties. However, based on what I saw this could be a need perceived by the practitioners rather than an actual requirement from the children.

5.5.3 Tom's 'focus activity'.

Kim explained part of the role of a practitioner was to plan, organise and set up *focus activities* as stated on the planning (Image 5.2). Usually two per session, focus activities are accessed by children with the support of an adult. Kim suggested

we can get more out of it with adult focus activities [because the children are at a] *certain age where they need us to stimulate them as well as to get engaged in some activities* [they] *get more from it with adult help*.

Kim acknowledges that some children may need extra support especially if the activities are new, different, or dangerous particularly as they involve the use of tools or equipment. Carefully thought through and planned, the adult focus activities seemed to involve some elements that were perceived to contain risky, dangerous, or messy aspects. In later weeks the same equipment or activity can be used by children on their own or with other children as part of continuous provision.

Image 5.6 Alex participating in the adult focus painting activity.

The focus activity observed for this study was a painting activity that involves Alex (Image 5.6). Although Alex was involved in this activity, he was not a main participant in this study and did not participate in the photo tours, children's observations, and interviews. Kim explained that it is *'best done outside'*, *'because it's a messy activity'*. In addition, Kim wanted *'the boys to join in and enjoy 'cos they might not choose to do it if it was inside'.* The painting activity was set up by Tom before the children arrived. It involved a large roll of paper rolled flat out on the ground, with paint already in trays with a selection of different balls (Image 5.6). During the observation Tom called over various children asking them *'Do you want to do some painting?'*. Alex was playing cars with other children when Tom invited him to paint. Alex went over to the activity area carrying his cars. By encouraging Alex to do his focus activity, Tom is prioritising his activity over Alex's own, reducing Alex's choice and control (Wood, 2010).

Tom explained the painting task to Alex and demonstrated what the task involved and instructing the children on how he wanted the activity to develop. For example, when Alex was reluctant to give up his cars and wanted to paint with them instead of the balls. In persuading Alex to use the balls, Tom is also directing the activity and keeping the focus on its educational outcome and purpose by sticking to his plan, which is a scaffolding style of interaction (Jordan, 2008). Tom as the 'expert other' instructs, and then models the activity for Alex, and so is scaffolding the learning *for* the child, and by explaining what to do Tom remains in control of what is being learned and demonstrates a one-way power share (Jordan, 2008).

Further, Alex completed the activity on his own rather than with his friend who had kicked the balls then ran away. Although Tom interacted with Alex one on one, the interactions are a further demonstration of the one-way power dynamic (Jordan, 2008). For example, Tom noticed and commented on small achievement such as '*picking up the ball'* and giving feedback on predetermined skills such as, '*rolling the ball in the paint'* , which are typical scaffolding interactions (Jordan, 2008). In addition, Tom's interactions were related to the assessment element of the activity or outcome. Using a checklist and I-pad '*for assessment purposes*', Tom recorded those children who completed the activity while also assessing their fine motor skill development. It seems that the focus on assessment shifted the emphasis of the activity from one of play or playful activity (Pyle and Danniels, 2017) to one with a more formal outcome. Unintentionally the activity managed and structured the children's play (Kushner, 2007) as it clearly had an educational outcome.

To summarise, the adult's role is primarily about supporting children's Forest School experiences. Amid concerns for safety and the prior experiences of children, there is a high ratio of adults to children which also allows for adults to provide support a high level of support if it is needed, including care needs such as toileting. Practitioners are also available to lead focus activities and be available to support continuous provision. Some focus activities are adult led because they may contain an element of risk or danger while others such as the painting activity might be messy. The focus activity observed involved some messy, large scale painting, and was planned in relation to educational and developmental outcomes of the EYFS (Section 5.3), (Wood, 2013). Planned with a high level of support in mind, in this context by directing the children in a 'playful' activity Tom scaffolded the activity and learning *for* children (Jordan, 2008). Working in this way Tom's activity had a high degree of predictability making outside play safer for the practitioners and children (Kushner, 2007). Activities that are scaffolded *for* children allow children the opportunity and benefit of being outside, although the high degree of predictability can regulate their experiences. Given the time limitations of this study it is difficult to know how typical this activity is, but considering what has been identified here regarding adult roles, it is necessary to take a closer look at how children play through continuous provision and their self-initiated play without adults.

5.6 Children's experiences

English pseudonyms have been used for all participants in the English case including the three children detailed below. All have experienced Forest School sessions for at least a year prior to this study. Three children participated in the study, Joe, Caitlin, and Olivia in the table.

Name and profile	Photo
Joe is three years and 6 months old. He likes '*chopping up trees*' and '*playing in that den and hiding in there*'	 Image 5.8 Joe
Caitlin is four years and 1 month old. She '*like(s) to play inside*' the mud-kitchen and '*the bridge cos I can jump*'.	 Image 5.9 Caitlin
Olivia is 3 years and 8 months old. She '*likes reading books outside*'.	 Image 5.10 Olivia

Table 5.1. The child participants, Forest School.

5.6.1 Favourite places

Until now the focus has been on practitioners' interpretations of Forest School through continuous provision and focus activities. This next section looks at children's experiences of Forest School by identifying children's favourite places from the photo tours.

Kim acknowledged that children have '*favourite places to play'* in Forest School. However, we know from earlier that practitioners have planned, selected, and set out the equipment and resources for continuous provision. The children took photos of their favourite places to play in, and favourite resources from what was available. The photo tour data showed all participants had their personal favourite places, with some places in common. For example, Joe selected three different dens, the playhouse (Image 5.9), his bench and a stick den (Image 5.4). Water featured quite strongly as all three children chose puddles (Image 5.7), while the pond (Image 5.8) was chosen by Kim, Caitlin and Joe, and various water trays were selected by Olivia. Kim confirmed:

if it's raining [there is] a lot of puddle play'. We 'always get a puddle there and it's always popular 'cos they can just splash in it with their wet suits on and not have to worry about getting wet.

Image 5.7 Feet splashing in a puddle.

Image 5.8. The pond.

Trees were photographed by Kim, Joe, and Olivia although logs and tree trunks also featured quite heavily across the data from all 4 participants. Lastly, all four participants photographed both the tyres and the playhouse. A common theme is that the places selected are all from continuous provision or places where they can play without adults and not an activity. Consequently, because of its popularity and scope for play opportunities the playhouse and play around it was used as a focal point in the child observations and is looked at next.

5.6.1.1 The playhouse

The playhouse was situated centrally to the outside space and can be seen on the map (Figure 5.1). It is a wooden shed like structure that is open fully on one side and has open 'windows' around the other three sections (Image 5.9). The light, open structure is so '*we can see them through the window'* (Kim said), which may have implications for the kind of play and how play happens inside. Over the five visits I noticed that there were always seats inside, while other items varied for example, a blanket, books, puppets, and jigsaws were placed there by practitioners as part of continuous provision.

Image 5.9. The playhouse (with open walls and windows).

There is consensus that the playhouse is popular. All three children chose it. It has a '*multi-use*', suggesting that they have played in it '*many times*'. Joe chose it because '*It's fun… that's where I play… it's for hiding with the game*'. Caitlin chose the house because '*my friends play there*' and '*likes playing with my friends*', and Olivia likes '*looking at books*' in there. Kim agreed, choosing it as one of her favourite places and selecting it as one of the children's

best places to play [the] *playhouse is popular lots of children love to play in there… it doesn't matter what we put in there, there will always be someone playing there'…I suppose it's special for them.*

Although there wasn't enough time in this study to observe children multiple times Kim suggested that '*children frequently play in the house*' and by going back to their favourite place children were '*learning through repetition and experience*'. Interestingly, like other favourite places selected by the children the playhouse is a place where they can play without adults.

Because of its popularity with the child participants the playhouse was used as a focal point for observing Joe, Olivia, and Caitlin. The three observations showed how each of the children played differently in the playhouse, and not always how the practitioners had planned. For example, Olivia sat on the mushroom seat and looked at books, Joe played with the puppets in the playhouse and then took them away to his favourite bench. Whereas Caitlin played families between the playhouse and the mud kitchen. The children had their own preferred patterns of play and made their own choices from resources that had been planned for and placed there by practitioners as part of continuous provision. Children's selection of play equipment shows they have some control and choice, albeit from resources pre-selected by practitioners that is child-initiated play (Wood, 2013).

For example, Kim said that the playhouse and mud kitchen were Caitlin's favourite places to play. Caitlin explained a mud-kitchen as '*an outside kitchen*', that features mud and kitchen equipment such as saucepans, spoons, and plates (Image 5.10). When observed Caitlin's play moved between the playhouse and the mud kitchen. Kim said that Caitlin '*always uses the mud kitchen*'.

Image 5.10. The mud kitchen.

After observation Caitlin's play seems to be an extension of the '*popular game*' of *families* that she started in the playhouse. Caitlin used the kitchen equipment in her play, combined with the found items or props, such as bugs, leaves and grass. Caitlin collected bugs from under logs and kept them in a bucket as '*children*', fed them grass, leaves and stones which she '*cooks*' and then feeds to her '*babies*'. Kim told me that Caitlin was '*fascinated by bugs...she knows where to collect bugs from… because she's done it before*', suggesting that this interest is based on previous experience of bug hunts, that she recalled '*we have done it many times before*' as she showed me the bug poster (Image 5. 5). Building on previous experiences and purposeful activity, shows how Caitlin is building knowledge and understanding (Vygotsky, 1978).

Kim posited that

children will revisit some things, different activities based on what their developmental needs are, so it is not the same very week…I could predict what kind of activities some children would always choose what their favourite things are and places to play [and] *that's why we revisit some things in our planning and provision.*

Caitlin had incorporated the two aspects of bug hunting and playing families, selectively repeating, and adapting the play and resources in different places depending on what was available. Caitlin's imaginative, open-ended play with props where she takes on a role (Bruce, 1991), strengthens the finding from earlier, that through continuous provision, children have the opportunity to repeat prior adult focus activities, through play, making them favourites. Kim showing her knowledge of the process of learning qualified that children could

'*explore it in different ways* [by] *returning to it themselves*' and learn '*through repetition and experience*' as they will '*only learn if they are comfortable and secure*' and then '*apply it to different situations*'.

Rehearsal of this kind is one way that children learn and practise social behaviours, taking on and exploring roles and situations on their own terms (Vygotsky, 1978). Within the time frame of this study it was not possible to identify if children did repeatedly return to favourite places and specific resources beyond Kim's comments.

5.6.2 Social interactions

Although all three children played differently in the playhouse a common feature is that they all played there on their own, even though Caitlin's reason for playing there was because '*my friends play there and I like playing with my friends in there'*. Observation revealed that Caitlin did not play with any other children in the playhouse at any other time during the observation. This pattern of solitary play (Parten, 1932) was also evident in Joe and Olivia's play. For example, when in the playhouse Olivia was alone when she looked at books. Whereas Joe played with the puppets on his own. Kim confirmed that Joe '*likes to play with the puppets' and Caitlin 'looks at books in the playhouse'*. Vygotsky (1978) suggest that solitary play is not inferior to group play, rather it is a way for children to reflect away from the pressure of others.

While Joe was playing with the puppets in the playhouse two girls entered and asked Joe '*What are you doing?'* and '*Can I have one?'* Joe did not respond verbally but turned away from them and left the playhouse with the puppets and dressing-up clothes. There are many possible reasons for his reaction, such as he was so involved in his own imaginary play world (Bruce, 1991) and did not want to be interrupted. Alternatively, he might have not wanted to share the puppets with them, indicating that he wanted control and ownership of the puppets and the play (Wood, 2010). Joe response of taking the puppets away from the house (and the girls) to the bench where he continued to play with them on his own, seemingly reinforced this explanation. Joe told me that '*this seat is special… I like to sit here*'. It seems that in his special place Joe felt comfortable enough to create his own rules and social play world (Vygotsky, 1978), particularly as he liked to be dressed up as he played with the puppets.

Caitlin's play between the playhouse and mud kitchen was also solitary (Parten, 1932), but reasons for this could be because of the location of the mud kitchen, around the corner away from the main hub of activity (Figure 5.1). The flow and movement of Caitlin's play seemed driven by the play story that she was immersed in involved her movement between the playhouse and the mud-kitchen. Playing in this location, away from the adult focus activities also took her away from other children and could limit her opportunities for social interaction and group play. Kim suggested that children liked to play in places away from adults such as the playhouse:

because so many children go in there and its almost… they almost don't like it when an adult goes in there with them I suppose its special for them because we talk to them through the

window but when we're in there the play almost gets stunted and they kinda look up at you like what are you doing in here so others pause their play and wait until we get out of there.

Although Caitlin's play was predominantly solitary, she created her own imaginary, play world (Bruce, 1991) with the bugs she collected calling them her '*babies*' or '*children*'. The absence of other children or adults means all her social interactions are with her '*children*' as she cooked and washed up talking to them constantly in her role as *mum.* This pattern of play behaviour in the mud-kitchen reveals Caitlin's control of the space and shows her making choices revealing that her play is child-initiated (Wood, 2010). Kim said Caitlin has:

got a good imagination as well, she can play quite regularly on the own like that there at the mud kitchen she's often solitary in her play whereas she can play quite nicely with other children but often can play there on her own like that.

When Caitlin's play moved her away from the mud-kitchen to the playhouse she was absorbed in her own play world and the social reality that she has created, through her own rules and her role in it, which is an important facet of social play (Vygotsky, 1978; Bruce, 1991).

Similar to Caitlin, Joe's play was imaginary and follows his own play story, that he is acting out or rehearsing (Bruce, 1991). Although Joe was seen playing on his own with the puppets, he was also observed using them as a way of initiating and social interaction with Will. When Joe left the playhouse, he dressed up and played with the puppets for a few minutes. Then he took the puppets to show Will offering him the foxy loxy hat, which could be an invitation for Will to join in with the play. Joe seemed to want to play with Will but is not quite sure how to. Will put the hat on but did not move from the den where he was already playing with other children. Joe, similar to Caitlin created his own safe social world with the puppets, where he can engage with them as part of his play, in a space where he has constructed the rules.

Observation also showed children's confidence when handling favourite or familiar equipment. For example, Caitlin's occupation of the mud kitchen and Joe's ownership of the puppets (Section 5.6.3). In addition, some activities and resources came from previous adult-led focus activities, revisited as continuous provision as explained earlier. Although the playhouse and mud kitchen have been constructed by practitioners as places for children to play, the children have made them their own and given them meaning through their interactions. Even with resources selected by practitioners for example the puppets, Joe took them out of the playhouse

to *his* bench and played with them there in his own way, indicating his control which is representative of child-initiated play (Wood, 2010). The examples of Joe and Caitlin both playing differently in the playhouse shows how flexible it is as a place to play. In addition, Kim has shown that she is familiar with the children's preferences and play patterns, as she was able to predict children's play choices, which may be useful when considering aspects of risk mentioned earlier.

5.6.3 Practitioner intervention

Bev was positioned in one half of the outside space and responsible for '*observing and supporting children in continuous provision*'. The following intervention involved many competing factors for example, Bev saw Joe and Will's interaction (above), went over to Joe and sat down on the bench and asked him '*Can you put the puppets in order?*'. She then watched him sequence the puppets as he retold the chicken licken story. Bev's interaction distracted Joe from Will, but it added further implications to their relationship dynamic achieved other things. Firstly, Bev moves into Joe's physical play space that he has created (Section 5.6.1.2). Her joint occupation of it, shifts the nature of the space. Bev's question, typical of a scaffolding style interaction (Jordan, 2008) has an educational outcome, altering Joe's child-initiated play that he controlled, to play that is now directed by Bev (Vygotsky, 1978; Wood, 2010).

Although Bev may be justified in distracting Joe, and of course there may be a background to this relationship that we are unaware of, but this was potentially an example of her intervening and possibly not waiting to see how the situation developed naturally. It may have been more useful for Bev to talk to Joe and support him through the social and emotional effect of his conversation with Will. In addition, it could be possible that Bev was aware of me and that the intervention was for my benefit.

5.7 Summary of Forest School findings

Data shows that Forest School happened as a weekly session. The outside play space has six trees and was physically constructed by the practitioners through the provision of equipment, and cognitively through the planning and construction of learning experiences. Partly because of the perceived risks involved in playing outside the practitioners had specific roles to support

this and keep the environment as safe as possible. Using the high ratio of 5 practitioners to 25 children, the practitioners had designated specific locations from where they could observe and were available to support children as necessary, for example toileting as well as providing practical support. A clear routine helps children who are inexperienced with playing outside.

Forest School sessions were planned through adult focus activities and the continuous provision. The practitioners planned the focus activities based on their understanding of Forest School from their training and children's development needs, using the EYFS. Where activities involved developing a skill, element of risk or a messy element they were led by a practitioner. For example, Tom's painting activity was planned and set up for the children, and where he demonstrated a scaffolding style of interaction with the children, he directed the activity to meet its educational, learning outcome, and the assessment he was carrying out alongside.

Later, the same the same equipment or activity, such as bug hunting can be recycled and used by children on their own or with other children as part of continuous provision to encourage experimentation and discovery, built on their previous experiences. Continuous provision is what the children do when they are not involved in focus activities, and they are also planned and set up by practitioners. Accessed independently from adults, there are a range of places such as the playhouse and various resources to stimulate the children's self-initiated play, play that build on children's prior experiences.

All the children chose the continuous provision playhouse as their 'favourite place', so this is where the observations for this study took place. Interestingly the places selected by the children as favourites were all from continuous provision or play rather than focus activities. Because of the partial privacy provided by the walls of the playhouse, the children have a sense of freedom as when they play in there, possibly as they can feel they are away from other children and adults. When observed both Caitlin and Joe showed their play preferences. Caitlin's imaginative play involved playing families but also incorporated elements from bug hunting as she used bugs and leaves as play props. Joe played with the puppets in his own way, and like Caitlin had his own play story with rules. Although both children were only observed playing on their own their play had a social quality that demonstrated their choices and control over the direction of the play.

The continuous provision of resources or activities carried out previously with adult support is an attempt by the practitioners to create familiarity from which children have the confidence to revisit places, favourite places, and resources. Playing in this way builds confidence, and independence as children can return to repeat favourite activities in familiar places, and almost self-regulate (Vygotsky 1978). In addition, the child can experience specific Forest School activities or equipment safely.

Although adults intervened occasionally for different reasons such as an immediate care need. Bev provided social and emotional support for Joe although she altered the way Joe was playing and interacting with the puppets, whereas Tom tried to encourage children to participate in his painting activity, although again the educational agenda embedded in the activity caused a shift in the balance of control and choice the children had resulting in playful, educational activities. Given the time limitations to this study it is not possible to know whether the high adult child ratios impacted positively or negatively on the play and learning taking place, as well as have a positive effect on the social and emotional development of the children. Particularly with Caitlin, Olivia and Joe playing on their own, the social interactions between children were limited, and the interactions observed came from adults and were adult-led or educational in purpose.

5.8 Similarities and differences between the cases

This summary brings together the findings from data collected in both the English Forest School and Danish Forest Kindergarten. To make a comparison of data across the two cases easier, the findings are summarised here and illustrated in Figure 5.3, using the same three areas of adult, child, and the environment as the literature review summary (Figure 2.3).

Figure 5.3.A synthesis of data from both cases

FOREST SCHOOL	BOTH	FOREST KINDERGARTEN
Practitioner, Teacher with Forest School training	Trained	Pedagogue
Regular, weekly session	Long term process Routine Familiar	All day everyday
Adult ratios 1-5		Adult ratios 1-7
Plans, leads activities organises resources for continuous provision	Constructs learning environment	
Provides resources, toys, play props and equipment	Creates conditions for play	Equipment and tools available
Views environment as dangerous and outside activities can be risky		Views environment as a place of challenges that can be overcome
Supervise and monitor	Observes	
Intervenes to protect and to support educational outcome	Adults intervene in children's play	Minimal supervision and intervention if dangerous
Interaction style scaffolding one-way power dynamic		Interaction style co-constructing with two-way inter-subjectivity
		Creates and cultivates an environment where children support and learn from each other
Child positioned as inexperienced		Child positioned as capable and autonomous
Driven through curriculum and educational outcomes	Compatible with 6 areas of the curriculum	Driven through play and early years pedagogy

(ADULT — left and right margins)

FOREST SCHOOL	BOTH	FOREST KINDERGARTEN
Children aged 3-4 years		Children aged 3-6 years
Both child-initiated play (continuous provision)	Play is child initiated play and driven by interests and experiences	Play initiated and driven by interests and experiences in natural environment
	Spontaneous	
Independent	Engagement *in* and *with* the natural environment	
Some participation in adult planned and led activities 'playful'	Explore, experiments, active envolvement	Adventurous Set own challenges
Use resources provided by adults	Props, tools, and resources located, adapted and used creativly in own play when needed	Solve problems as part of play
	Demonstrates decision making and control over places played in, and type of play	
	Play in places away from adults	
	Repeat favourite play in preferred places	'set plays'
	Create own imaginative play worlds	
Solitary	Rehearsal and roles invent own rules	Social in mixed aged/friendship groups younger/less able copy and learn from older/more able
'Social' with toys and props	Social	
		Hierarchy

(CHILD — left and right margins)

Cont'd Figure 5.3.A synthesis of data from both cases

5.8.1 The environment

Seen in the middle section of figure 5.3, both Forest School and Forest Kindergarten happen outside, in a natural environment. Forest Kindergarten location has numerous trees of different varieties whereas the Forest School site only has 6 (see Image 4.1 and 5.1). Both physical environments have naturally afforded slopes, grass, mud, and assorted shrubs, although not seen in the photographs, an impression of these are indicated in the maps (Figure 4.1 and 5.1). The maps and keys also show a range of fixed equipment provided by the adults in each setting, such as the sand box, playhouse and climbing frames, which is common to both settings (Figure 5.3). Equipment selection and its location has been decided by the adults, based on their preferences which may account for the difference in pedagogical approach, learning outcomes and children's preferences. The maps (Image 4.1 and 5.1) and photographs (Figure 4.1 and 5.1) also reveal the difference in scale of the two locations.

Favourite places selected by children for the study were similar, such as the sand box and water features, with the playhouse selected by all participants from both cases and in the middle section of figure 5.3. Observation showed that the playhouse is a place where children in both cases played without adults. In Forest Kindergarten children's play developed naturally out of the natural features such as trees, and children had more freedom to climb trees, such as Oska

(Image 4.14) and build dens (Image 4.3) *without* adult supervision, whereas in Forest School children were able to climb a buddlia bush and build dens (Image 5.4) *with* adult supervision. Levels of freedom seem to be closely associated with perceptions of risk and safety, that are further related to different constructions of the child. In Forest Kindergarten the child is viewed as capable, risk is seen as a normal part of everyday life and therefore children are allowed freedom. In contrast, in Forest School the child is viewed as inexperienced and needs protection and risk is something that children need protecting from through health and safety measures such as high adult child ratios. Children are only allowed freedom with adult supervision. These differences are in positioned in corresponding sections of figure 5.3.

Different perceptions of risk are closely associated with different views of the outside environment as either dangerous or inspiring and motivating. In Forest Kindergarten the natural environment is used by pedagogues and children to motivate their play for example the trees, logs and branches are incorporated into the fairy girls and sand boys play stories. Similarly, although on a smaller scale Caitlin includes bugs and leaves into her play story. In Forest School there are fewer natural resources and this shortfall is filled by Kim providing sticks, toys and play equipment. In Forest Kindergarten there is an abundance of natural resources, which is perpetuated by not tidying up so resources can be found all around. While there are limited toys, such as spades and buckets which children search for, while specialised equipment such as knives for whittling are sought out when needed. The natural resources provided by the environment is a feature common to both cases (figure 5.3)

5.8.2 Adults

Adults in Forest School are referred to as practitioners with early years qualifications and separate Forest School training, whereas in Forest Kindergarten the pedagogues all have early childhood degrees, and no separate qualification is required for working in an outside kindergarten. However, some training is required and common to both examples and recorded in the centre of figure 5.3. Young children playing outside all day in Forest Kindergarten is established practice in Denmark, whereas in England Forest School is an alternative to nursery provision and is typically a weekly session. Both sessions have a similar start and end, even though the Forest School session ended at lunch time, the Forest Kindergarten day is punctuated with a brief pause for lunch before play continues after.

In Forest School, practitioners use the EFYS curriculum guidance to plan focus activities that are led by the practitioners, while continuous provision is also planned but accessed by the children on their own. Both are based on children's interests and are developmentally appropriate. When the practitioners are not leading a focus activity, they are responsible for observing and managing children in the different areas of the Forest School space, as they engage in continuous provision. Pedagogues also refer to the curriculum guidance in the DCA, but they only plan for long term projects. All other activity is play based and initiated by the children and inspired by being in the natural environment, and through the resources it provides. The importance of the curriculum to both approaches is acknowledged in figure 5.3.

In Forest Kindergarten the children are involved in child-initiated play and the pedagogues role is to observe them, unless they are needed to intervene for a safety concern such as when Erika intervened with the sandboys but only after she had watched and waited to allow them time to work it out for themselves. In contrast, in Forest School Bev intervened to support Joe, but as she scaffolded the situation *for* him, she shifted the power balance of Joe's play away from this interests and intentions towards her intended educational outcome. Similarly, when Tom led a focus activity with an educational outcome, he also scaffolded the children's learning and his interactions with the children were also based on a one-way learning agenda. Although Tom modelled the activity, he had a specific outcome in mind and remained in control of the outcome, so Alex was not able to take the lead and had only a limited choice. To achieve his educational aim, and for assessment purposes Tom observed the children doing the activity, recording his observations. Marc was asked for help by a group of children who wanted to whittle sticks, so Marc took part in the spontaneous and child-initiated whittling activity. During the activity Marc observed the children and whittled alongside them 'modelling' but also responded sensitively to the needs of the children and the demands of the task. He used a close social dynamic based on an equal relationship that co-constructed an understanding between them, creating a two-way intersubjectivity that provides security for the children while at the same time was empowering. This difference in pedagogical approach in each case is identified in figure 5.3.

There seems to be a close link between the perception of risk regarding the outside environment (Section 5.8.1.), and the view of the child as either capable or inexperienced, which influence the adult's role, especially regarding levels of supervision. High adult child ratios in Forest School of 5 adults to 25 children in Forest School compared with 3 adults to 22 children in Forest Kindergarten, as well as the difference in scale of outside space combined create a different atmosphere. In both contexts practitioners and pedagogues had specific and clearly defined roles. As seen in figure 5.3, observation is an integral part to practice, although in each context it was used for different purposes either assessment in Forest School or to guide and direct interactions in both Forest School and Kindergarten. Both pedagogues and practitioner's interventions involved stepping in to support a child with care needs such as toileting or falling over.

5.8.3 Children

In both cases, children chose to play in similar places, such as the playhouse or *legehus*, water and the sand box. Provided by adults fixed equipment, such as these provide flexible play opportunities, that allow the children to adapt them for their own play. However, in both cases these favourite places are where children could also play away from adults, which can be seen in the middle section of figure 5.3. Confirmed through observation, the practitioners, and pedagogues both recognised that children frequently played in the same places, repeated favourite play, and often used the same resources.

Child-initiated play was seen in both cases, although in Forest Kindergarten child-initiated play dominated, whereas in Forest School there was a combination of focus activities and continuous provision or play, although both were planned by the practitioners (Figure 5.3). These resources used in planned activities and provided as continuous provision were selected by practitioners and often came from the inside classroom such as books, puppets and painting, rather than using the natural environment as inspiration it was in Forest Kindergarten.

The play in Forest Kindergarten was motivated by the many natural places outside such as trees. In both settings natural resources provided inspiration for props in children's play and they were seen looking for the toys or tools they needed. In Forest School this meant children did not always use the resources that were provided in the way practitioners may have planned, for example Joe and the puppets and Caitlin used bugs as her children. In Forest Kindergarten

children looked for tools such as spades, buckets, and knives to use when they needed them, and adapted sticks as props for their imaginative play.

In Forest School there was an abundance of toys and resources, although they had been selected and set out by practitioners. In contrast, pedagogues in Forest Kindergarten did not pre-select or lay out any resources and there were only a few pieces of equipment visible, such as spades and buckets in the sand box. Unlike Forest School, Forest Kindergarten had no formal tidy up, so resources could be found by the children where they had been left the previous day. As Forest School sessions were weekly this was not possible and so the groups tidied everything away after each session.

In choosing the playhouse, children from both settings showed a preference for play without adults (Figure 5.3). Even when the children in Forest Kindergarten were supported by a pedagogue, as with Marc in the whittling activity, I observed them peer scaffolding each other. However, the children observed in Forest School played predominantly on their own, whereas in Forest Kindergarten the children played in social groups. Although, compared with Anneka and Oska, Caitlin's and Joe's play was more solitary, their play still showed their understanding of social interactions, as rather than socially interacting with their peers, like the fairy girls and the sand boys, Joe and Caitlin interacted socially, through their imaginations and with their play props. Consequently, there was evidence that all the participant children had created their own play worlds, alongside their own social worlds, as their play involved rules that related to their play roles and narratives, an important finding and shown in figure 5.3.

Chapter 6 Discussion

6.1 Introduction

The focus and aim of this study are to understand more about the pedagogy of Forest School in England, and its relationship to Forest Kindergarten in Denmark, using the following research questions:

RQ1: How do adults interpret and enact pedagogy of Forest School in England and Forest Kindergarten in Denmark?

RQ2: How do children experience pedagogy in Forest School in England or Forest Kindergarten in Denmark?

RQ3: What are the similarities and differences between Forest School and Forest Kindergarten environments and how do these impact on the experiences of their users?

Initially because of the differences in pedagogy and practice between Forest School and Forest Kindergarten suggested in the literature review, each case was presented as a separate example. This chapter presents three sections, adult experiences, children's experiences, and environment, that correspond to the research questions above, which were formulated from issues raised in the literature. Further themes and subthemes have been taken from the data presented in the thematic map (Appendix 13) and used to present a discussion of findings. Using an exploratory case study approach (Yin, 1994), to ask and answer How? and Why? questions, this chapter looks at how the three elements of adult, child and environment interact and come together as either Forest School or Forest Kindergarten pedagogy. These individual features are presented in separate sections of figure 6.1. However, closer analysis and interpretation of the data from a constructivist perspective, rather than just revealing distinct differences, has identified some interesting similarities and new knowledge, and these are positioned in the centre or overlapping section of figure 6.1. Where the themes (Appendix 13) identified in the findings (Figure 5.3) match with the literature (Figure 2.3), they are shown in figure 6.1 in black text, while the blue text corresponds to themes found only in the data, and therefore considered to be new knowledge. In conclusion, this thesis identifies the similarities between Forest School and Forest Kindergarten, then uses a constructivist perspective to reveal new information which is combined (Figure 6.1), as a pedagogy of Forest Learning.

Figure 6.1. Model of Forest Learning.

FOREST SCHOOL	BOTH	FOREST KINDERGARTEN
ADULT		**ADULT**
Early Years Practitioner Teacher Forest School trained, "Leader"	Trained	Pedagogue
Adult Ratios 1-5		Adult ratios 1 -7
Regular, weekly session	Long term process develops overtime Routine Familiar Constructs learning environment Creates conditions for play	All day everyday, every day
Plans, leads activities, organises resoures for continuous provision		
Provides resources, toys, play props, and equipment		Equipment and tools available
View environment as dangerous and activity outside activities can be risky		View environment as a place of challenges that can be overcome
Interaction style scaffolding one-way power dynamic		Interaction style co-construction with two-way intersubjectivity
Supervise and monitor	Observation	
Intervenes to protect and to support educational outcome	Adults intervene in children's play	Minimal supervision. intervention if dangerous Let children do it for themselves
		Creates an environment where children support and learn from each other
Child viewed as inexperienced some independence		Child viewed as capable and autonomous
Curriculum and educational outcome driven	Compatible with 6 areas of curriculum	Pedagogically driven play and early years pedagogy
CHILD	**BOTH**	**CHILD**
Children aged 3-4 years		Children aged 3-6 years
Both child-initiated play (continuous provision) and some participation in adult planned and led activities	Child-initiated play	Play initiated and driven by interests and experiences in natural environment
'playful'	Spontaneous	
	Engagement *in* and *with* the natural environment	
	Explore, experiments, active envolvement	Adventurous Set own challenges, solve problems as part of play
	Props, tools, and resources located, adapted and used creatively for own purpose in play when needed	
Use resources provided by adults	Demonstrate decision making and control over places played in, and type of play	
	Play in places away from adults	
	Repeat favourite play in preferred places predictable	'set plays'
	Create own imaginative play worlds	
	Rehearsal and role play	
Solitary	Invent own rules	Play in mixed aged/friendship groups younger/less able copy and learn from older more aable
'Social' with props and toys	Social	Hierarchy

180

(cont'd) Figure 6.1. Model of Forest Learning.

FOREST SCHOOL	BOTH	FOREST KINDERGARTEN
6 trees	Outside natural environment	Forest, Woods
	Familiar	
Small scale	Affordance of natural landscape provides resources, motivates play and activities	Large scale
	Different locations lead to different experiences and different outcomes	Being outside all day every day exposed to the elements and nature
	Locations have unique features	
backdrop	Fixed equipment placed by adults	
Risk is seen as negative managed by adults 'safe enough' 'protectionist'	elements of risk	Risk is seen as positive, immersion in outside environment normalised and familiar, problems to solve provides, challenges to overcome
Scaffolded *for* children	Constructed by adults 'no two are the same'	Co-construction and inter-subjectivity *with* children

(ENVIRONMENT — left margin label)
(ENVIRONMENT — right margin label)

However, comparing two cases of similar yet different practice is not straightforward. Throughout there has been a struggle in trying to present an honest and authentic study of each case, that is representative of the interpretations and experiences of both the adult and child participants, while presenting each case fairly and equally. Throughout this discussion, where there are elements that are common to both the practitioner and the pedagogue the term adult is used. Similarly, when there are elements that are common to both cases the term Forest Learning is used, which leads to a new model or pedagogy of Forest Learning based on the findings from this study.

6.2 Adult's interpretations of Forest Learning

Adults interpretations of Forest Learning and how these are enacted are presented through the themes arising from the data and can be seen in the thematic map (Appendix 13). For example, the subthemes of routine, planning and play, projects and activities, planned and child-initiated play, time and frequency, observation and interactions between children and adults.

6.2.1 Routine

Each session of Forest School and Forest Kindergarten started in a similar way. In both cases, the children sat in a circle and supported by the adults, chose where they wanted to play, who they wanted to play with or in Forest School an activity they would like to do. In both cases, children selected the playhouse as a favourite place to play, and both Kim and Erika identified it as a popular place. Significantly the playhouse is a place where children can, in both cases play away from adults, and this is explored in more detail later (Section 6.3). In allowing children choice, albeit from the different provision in each context, the adults are encouraging the children to initiate their own play and where it is "freely chosen" it is the closest to "pure play" (Wood, 2010, p.20). It is through free play that Vygotsky (1978) claims children develop self-control and self-regulation.

An important part of playing outside is the '*routine and familiarity'*, provided in both cases by the fixed equipment such as the playhouse, climbing frames, sand box that have been provided by the adults. As most children in Forest Kindergarten attend every day it makes it easier for them to decide where they want to play in their favourite places, and with their friends, whereas in Forest School sessions, the resources and activities made available by practitioners vary from week to week, although some popular resources are made available more often. Importantly the child is still able to choose from a narrow range, resulting in activities that are 'playful' rather than child-initiated or "pure play" (Wood, 2010, p.20). In both cases '*as children become familiar and confident in their surroundings…they are confident because they know it so well…* [and they] *only learn when they are comfortable and secure'*. However, by not planning activities, nor providing toys, the pedagogues leave the decision making with the child, hence the selection of familiar places and friends rather than activities (as none are on offer), resulting in "free play" that developed out of the child's interests and the natural environment (Wood, 2010, p.20).

Lastly the routine of tidying away signals the end of the Forest School session as resources and toys are always put away because the location is used by other classes. Interestingly in Forest Kindergarten there was no official tidy up time, rather the children are expected to tidy up as they go, which resulted in resources or tools being left where they were being used. Erika justified this pedagogical decision,

we do not know what...children are thinking...if we stop them and make them put everything away, they will have to start all over again from the beginning, not carrying on in their play and their thinking

and explaining the process of how children learn, by returning and continuing. Her clear articulation shows her the deep understanding of the pedagogy of play and applies a constructivist perspective on how children construct knowledge and meaning from their experiences, and through experimentation and exploration (Olusoga, 2014; Vygotsky, 1978).

In constructing a Forest Learning experience, adults have built in routine and familiarity as part of regular visits, whether visits are every day or weekly. Central to pedagogy, adults allow children to choose where and what to play in an environment that they know well, where they can return and revisit these familiar and favourite places, as they construct meaning and knowledge. Giving children the freedom to choose and engage in free play, rather than activities that have educational outcome means that they are engaged in the process of play in which they are more involved.

6.2.2 Planning and child-initiated play

While there is evidence of adults planning in both Forest School and Forest Kindergarten, the emphasis is different. In Forest Kindergarten only long-term projects are planned by pedagogues as the focus is on child-initiated play. Whereas, in Forest School short term focus activities and continuous provision or play, are both planned for by the practitioners.

6.2.2.1 Projects and activities

In Forest Kindergarten, even though the emphasis is on child-initiated play, "plans" (Image 4.4) were brief notes made about potential or upcoming projects or a reminder to do a job, for example to cut down overhanging branches. Although not seen in this study Erika told me that long-term projects happen over consecutive days and sometimes weeks (Knight, 2013; Williams-Siegfredson, 2012). By planning projects out of children's play, pedagogues can extend children's interests and encourage creative and imaginative play through more diverse activities (Fjørtoft, 2004). In addition, activities can evolve out of an everyday task (Jensen, 2011), for example the whittling activity came out of Marc cutting down the branches (Section 4.3.1).

In Forest School "every week…different (focus) activities" and continuous provision are "planned" by practitioners, in relation to children's interests, developmental needs and the seasons, as well as using the EYFS (Image 5.2). It is common practice in early years provision in England to have a balance of adult directed and child-initiated activities that includes free and structured play (Siraj-Blatchford and Sylva, 2004). Usually there were two focus activities each Forest School session. Kim said that activities can be "open-ended", but the act of planning by adults, shifts the focus from one of play towards one of work (Pyle and Danniels, 2017; Wood, 2010). Further the painting activity had an intentional, educational outcome determined by the practitioner, which moves the activity still further towards one of work (Pyle and Danniels, 2017).

Observation of Tom's painting activity (Section 5.5.4) also showed him leading the activity. Tom's involvement in the activity contributes further to the shift away from being playful, towards a work focus (Pyle and Danniels, 2017; Wood, 2010), and is similar to the patterns of behaviour identified as over-supervised play in previous Forest School research by Maynard (2007a). In contrast, the spontaneous, child-initiated whittling seen in Forest Kindergarten, was not planned and although it came out of Marc's cutting job, it had no educational intent from the pedagogues, so it can be classified as child-initiated (Wood, 2013). Marc's only role was to support the children's use of knives (more on this can be seen in Section 6.2.3.1). In addition, the children showed choice and control (Jarvis, Brock, and Brown, 2014; Wood, 2010), as well as setting their own agenda and developing their personal skill level (Wood, 2013). Play that is child-initiated and personally motivated, like this example of whittling is more enjoyable for children (Meckley, 2002; Pelligrini,1991; Saracho, 1991; Vygotsky, 1978;) and because of the sense of ownership (Bruce, 1991) children can become more deeply involved in the process, as seen here and creating positive effects (Vygotsky, 1978; Wood, 2009).

Kim talked about '*building up*' the Forest School activities '*over time*' so children can '*enjoy it on all levels*' (Section 5.3), while acknowledges children's inexperience of playing outside, views planned activities as a way of facilitating or scaffolding children's experiences using their ZPD to perform at a higher level (Vygotsky, 1978), an approach advocated by Knight (2013, p.19). Planning for children's development (Broadhead, 2004), Kim also provides a progression of learning that with regular exposure to outside learning becomes deeper and more meaningful over time (Vygotsky, 1978). In planning *for* and then operating in the ZPD, the dynamic between the practitioner and learner is a one-way or limited two-way power share, with the control of what is learned in the hands of the adult and essentially a transmission model (Wood and Attfield, 2005). During the whittling activity (Section 4.3.2.) Marc's preferred style

involved creating intersubjectivity with the children. Rather than using a scaffolding style Marc was observed co-constructing meaning *with* the children, using a more equal power share than when scaffolding (Jordan, 2008). As can be seen in Figure 6.1, these different constructivist pedagogical approaches, have a different emphasis which has not been explored before in Forest School literature and therefore is new knowledge and significant for the model of Forest Learning.

The focus activities and related resources were frequently recycled into continuous provision, and played with independently by children, such as Caitlin's bug collecting (Section 5.6.2). Further the use of focus activities as continuous provision builds on the familiarity element explored earlier, while scaffolding children to complete achievable tasks, step by step, then through continuous provision children can experiment by themselves through trial and error (Davis, Waite and Brown, 2006; Knight, 2013). However, there is a danger that if sessions are not regular children do not experience progression in their learning. Given the frequency of Forest Kindergarten there are more opportunities for regular exposure and opportunities to revisit activities.

Although in each setting there was agreement that Forest Learning should be planned for, this looked different in each case, so there is no consensus over whether this should be for long term projects, planned focus activities. continuous provision and child-initiated play. What has been identified in this study is that adults need to be comfortable with children having some ownership and control over their play and children are able to make decisions regarding their play choices and preferences in particular their play places. Consequently, adults need to have a secure pedagogical understanding of young children's play, particularly when play is child-initiated.

The combination of child-initiated play as well as planned activities or projects were identified in both cases and supported by literature. However, the whittling activity was personally motivated and spontaneous, which according to Pelligrini (1991); Saracho (1991) and Vygotsky (1978) makes play more enjoyable. In addition, the children demonstrated some control as they made their own decisions regarding their play, resulting in them having ownership over the outcomes and becoming more deeply involved (Wood, 2009). In contrast, Tom's planned, painting activity had an educational outcome, and therefore was not child-initiated (Wood, 2010). Further, Tom's involvement in leading the activity resulted in very limited decision making from the children and reduced their involvement and engagement, which according to Vygotsky (1978) results in a less enjoyable activity. Therefore, where possible child-initiated play or personally motivated activity is the preferred approach to Forest

Learning. Where activities are planned, they should involve children in decision making to allow them ownership, and not always have an educational outcome, rather focus on just the enjoyment and process of *just* doing. Findings from this study suggests that to support a child-initiated play environment, adults need to have a secure pedagogical understanding of child-initiated play so that children can make their own choices and decisions so they can develop their play preferences.

6.2.2.2 Play

In Forest Kindergarten play was "free", child-initiated and driven by the environment or circumstance. Erika justified this approach, "play is difficult to plan for" as the "children make the curriculum". Apart from projects there were no planned activities (Section 6.2.1), as children were positioned as active participants in their own learning (Sandseter, 2014; Williams-Siegfredson, 2012), with the emphasis on children having ownership of their play (Wood, 2010). The children choose where to play, what to play and who to play with (Sandseter, 2014), for example, the fairy girls (Section 4.4.2.2) chose to play fairies in their favourite bush (Image 4.13), while Oska (Section 4.4.2.2) loved climbing and chose to play pirates in the pirate tree-ship (Image 4.14). As the environment is the primary resource (Sandseter, 2014), children were motivated to initiate their own play *in, with* and *through* the natural environment (Gulløv, 2003), making detailed planning unnecessary (Williams-Siegfredson, 2012). This study found that the adult's role is to co-construct an appropriate learning environment and facilitate children's play.

In Forest School, Kim used the terms continuous provision, free flow play and child-initiated play synonymously (Section 5.5.4) to mean everything that is going on apart from planned, focus activities. Practitioners plan (Section 5.3) the resources according to the children's interests, their developmental needs and the EYFS (2014), which involves setting up play equipment and resources, however, in so doing the practitioners are removing some of the control and ownership of the play away from the children (Wood, 2010). The practitioners also imposed their ideas of what should be played and where, which according to Wood (2010) could limit the opportunities and potential for child-initiated play. However, this was not the case with Caitlin and Joe, as Caitlin used the playhouse and mud-kitchen in her own way and both Caitlin and Joe (Section 5.6.1.1) adapted the resources provided by practitioners and used them in imaginative ways to suit their own play stories, giving their play a deeper meaning (Bruce, 1991; Vygotsky, 1978). Showing her initiative, Caitlin also used the natural

environment to locate her own resources, such as bugs and leaves which she included in her play (Moyles, 2010).

Kim justified the organisation of play through continuous provision resources, suggesting that the '*children have little or no experience of being outside*'. Her view that children are '*inexperienced*' and consequently need help and support, informs her interpretation and enactment of Forest School which was seen earlier with the scaffolding approach (Section 6.2.2.1), and the children coming out in '*small groups for short periods of time'* and '*we've built on things each week'*. Parallels can be seen here with Waite and Davis's (2005), study where children took greater control over their play as their confidence grew. It seems that Kim has scaffolded experiences *for* children, tailoring them to suit their needs by gradually introducing 'Forest School' through a mixture of adult-initiated activities and continuous provision resources as a way of moving the child forward in their ZPD (Vygotsky, 1978). With the adult leading the activity, the child can play and learn at the highest level possible (Vygotsky, 1978), although with a one-way power where the adult remains in control of what the child experiences and learns (Jordan, 2008). Conversely, in the child-initiated play seen in Forest Kindergarten there is no evidence of a one way or limited two-way power share (Jordan, 2008), rather the pedagogues allow the fairy girls and sand boys to control and direct their own play (Section 4.4.3.1 and 4.4.3.2), emphasising the reciprocal relationship between the adult and child, which is empowering for the children (Jordan, 2008).

The different balance between planned activities, continuous provision, and child-initiated play identified in the two cases could be attributed to the different curriculum and assessment requirements in each context. Both Denmark and England have an early years curriculum, with six areas that broadly relate to language, social, emotional, physical and intellectual development. The Danish curriculum is regarded as a soft approach to ECEC (Wall, Litjens, and Taguma, 2015). As pedagogy is an integral part of the early curriculum guidelines (MSA, 2014) it is usual for institutions to use informal learning approaches such as Forest Kindergarten (Williams-Siegfredson, 2012), which could account for the prevalence of child-initiated play seen in this study. Even though Forest School is an alternative approach to ECEC in England, it is compatible with the EYFS (2014), (Davis and Waite, 2005; Knight, 2013). However, the introduction of the EYFS in England also prompted an increase in structured, formal learning (Knight, 2012; Leather, 2018), and a reduction in time spent outside, which could account for Kim's claim that young children are not used to playing outside, either on their own or supervised by adults.

A contributory factor in understanding the interpretations of play in each case may be related to the different place of assessment in each context. While in England there is a formal assessment programme that includes progress checks at 2 and 5 years (Ellyatt, House and Simpson, 2009), in Denmark there is no formal pre-school assessment (Wall, Litjens, and Taguma, 2015). Further the state in Denmark has a minimal intervention policy which is mirrored in the minimal structure imposed by pedagogues in Forest Kindergarten (Wagner and Einarsdottir, 2006), whereas the high level of accountability and state directed monitoring in England may be responsible for the added pressure on practitioners to deliver the statutory requirements of the EYFS through Forest School (Maynard, 2007a). The combination of planned activities, continuous provision and child-initiated play identified in Forest School and the dominance of child-initiated play in Forest Kindergarten are a direct result of these contextual differences. As child-initiated play was used in both examples, this study finds that it should be the preferred way for children to experience Forest Learning, and so placed centrally in figure 6.1.

6.2.2.3 Time and frequency

Indirectly, the different amount of time spent doing Forest Learning across the two cases seems related to how it is defined, and more specifically the use of play. As an established approach to ECEC, children aged 3-6 years attend Forest Kindergarten daily over three years, regardless of the temperatures or weather (Gulløv 2003; Jensen, 2011; OECD, 2000; Williams-Siegfredson, 2012). Whereas Forest School, one morning a week, in addition to usual provision typically happens over one nursery year with children aged 3-4 years (Knight, 2009, 2012). Although Kim acknowledges that children "benefit from it being regular" (Section 5.3), this time allocation seems to have developed out of convenience as it roughly corresponds to a typical morning or afternoon nursery session. Even though sessions take place regularly, over an extended period of time, how regular is interpreted and the reality of regularity may vary in practice as identified by Murray and O'Brien, (2005); O'Brien and Murray, (2006). As established earlier (Section 6.2.1) in creating an environment where children can explore from a secure base, regular visits to the Forest Learning location help build the familiarity identified as important in this study.

Daily attendance at Forest Kindergarten provides children with more experience of playing outside, when compared to children attending weekly Forest School sessions. The frequency of visits to the same site makes Forest School different to other outdoor activities, also

highlighted by Murray and O'Brien (2005) and O'Brien and Murray (2006), also means that children are more familiar with their surroundings. Switching between two 'codes' of practice can be difficult for the practitioners in Forest School (Davis and Waite, 2007), whereas there is only one code in Forest Kindergarten for both the pedagogues and children, and so involves no switching. Kim acknowledges that *'outside learning is different to inside learning'* but struggles to fully articulate a clear distinction. While it is inevitable that doing Forest Kindergarten daily will amount to a different experience for children, when compared to doing Forest School weekly, this does not fully explain the difference in pedagogical approach seen in this study. It is difficult to know whether in England, children's inexperience and minimal time spent outside is because outside play is not emphasised in the EYFS, or whether children's inexperience has created a need for the scaffolded pedagogical approach identified here, resulting in the weekly experience of Forest School, and a pedagogy that is complementary to the EYFS. However, what is known is that regardless of context, and whether experiences are weekly or daily the children in both cases initiated their own play.

Observed in this study, and identified by Kim and Erika, the children in both cases chose favourite places to play, such as the playhouse, as well as playing a specific play or what Erika calls 'set plays', in these places. Compared with the shorter, weekly session of Forest School, full days and daily attendance at Forest Kindergarten allows the children more opportunity to return to places the same day, the next day or later in the week and continue with a task, which according to Vygotsky (1978) helps consolidate learning. The limited time spent in Forest School, compared with the more frequent, daily attendance of children in Forest Kindergarten, does not allow children to become as absorbed in their play or to complete tasks at their own pace, which could result in a lack of momentum.

The restricted amount of time allocated to Forest School could further explain the focused activity and structured play approach favoured by practitioners, as a way of providing a framework, familiarity and meaning to the outside play sessions. In addition, Kim recognised that the '*best*' or '*deeper and more meaningful play'* happened at the end of the block of time in Forest School, and similarly Knight (2013, p.19) suggests that it takes at least six weeks of sessions for children to become familiar with the environment, and comfortable with this different approach. Therefore, based on the findings of this study, it is clear that Forest Learning should not be a one-off session or a series of unrelated play activities that happen in the same place, rather it should be regular and frequent enough for children to be familiar with the location and outside environment and be able to remember their favourite places.

6.2.3 Observation, interactions, and interventions

Although there were some similarities seen in the role of pedagogue and practitioner each had distinct ways of working that are difficult to compare, yet an understanding of what is different is important for understanding how the adults interpret their role and the underlying pedagogy. As the *'the most valuable resource in the room'* the adult, whether interpreted as teacher, or facilitator responds to the child's interests, choices, and individual needs. The role of the adult is significant in supporting children through the process of acquiring new information, especially the active engagement through discovery and experimentation as they construct their own understanding of the world (Vygotsky, 1978). Starting with Marc and Tom this section looks at adult and child interactions during an activity, whereas Bev and Erika's interventions are representative of instinctive responses to situations.

6.2.3.1. Tom and Marc

Both Marc's and Tom's activities have a different starting point. Tom's activity was planned and prepared for, whereas Marc's was a spontaneous, child-initiated activity. Tom as the 'expert other' instructs and models the task for Alex (Vygotsky, 1978), and in doing so he scaffolds the learning *for* him (Bruner, 1976; Jordan, 2008). As the teacher or instructor Tom controls what is being learned (Jordan, 2008; Wood, 2010), by choosing the method and then explaining what to do. He remains in control of what is being learned by questioning Alex and praising him on his achievements, as he competes the task, with specific educational outcomes in mind (Jordan, 2008; Wood and Attfield, 2005). Both demonstrate Tom's controlling and managing style of interaction as a one-way power share (Jordan, 2008).

Initiated and driven by the children's interests, Marc used a co-constructing approach to mediate the whittling activity *with* the children (Jordan, 2008). Marc was able to use his observation of the children, to 'know' the best kind of help to give, how much, and when (Vygotsky, 1978). By gesturing or saying a few quiet words of encouragement or direction, but not questioning or interrupting, he created intersubjectivity with the children (Olusoga, 2014), with a two-way power dynamic (Jordan. 2008). Marc supported the children, giving help when asked for, for example cutting the branches into smaller, more manageable pieces, or whittling a hard piece of wood but importantly letting the children have a go themselves (Davis, Waite and Brown, 2006; Knight, 2013). He did not dominate the process, rather Marc valued the children's expertise, and in supporting and guiding them to assess the situation for themselves, he deferred to the children to make their own decisions, creating a reciprocal relationship

(Jordan, 2008). Marc's behaviour and subtle interactions allowed the children to work things out for themselves which Jensen (2011) and Williams-Siegfredson (2012) claim is an essential part of Forest Kindergarten. At the same time Marc facilitated the children's ownership of the activity they had initiated and were immersed in, and his interactions encouraged children to work *with* each other (Jordan, 2008), and through a symmetrical power balance (Jordan, 2008), they co-constructed the experience between them (Olusoga, 2014).

As part of the painting activity, Tom observed and assessed the children's physical development and recorded the information on an I-pad, however as he did this he physically moved away and distanced himself from both the activity and the children. Marc also used observation during the whittling activity, however different to Tom he participated in the activity. By sitting with the children as a member of the group, Marc was involved in the task, whittling alongside the children as a role model, providing an opportunity for them to watch him if they chose, but not controlling the activity (Chi, 1996). Interestingly, Marc inhabited the same space as the children, but he did not dominate it. Interactions were infrequent and mostly came from the children, even then dialogue was equally balanced between the pedagogue and child, and not dictated or dominated by Marc. Marc gave children time and space to work independently and try things out for themselves at their own pace and to self-manage, knowing that help was not far away, and is a further demonstration of an almost parallel, reciprocal relationship (Vygotsky, 1978), where the experience is jointly constructed *with* children through intersubjectivity (Jordan, 2008). The almost symmetrical balance of power moves away from a transmission of knowledge, towards the interests of the learner (Vygotsky, 1978).

While Tom's distance was physical, Marc's 'detachment' was a pedagogical one, as he deliberately 'stood back' to watch and wait (Wagner and Einarsdottir, 2006) reinforcing the notion that play in Forest Kindergarten should be "free from excessive control and supervision" (Wagner, 2006, p.292). Although Tom physically stood back from the activity and the children, he did not use the information from the observation to inform his immediate interactions, even though they may have informed the planning of future activities. Further the use of the I-pad to record the observation generated a formality as it defined Tom's role in the activity as an official observer. Tom's formal management of the painting task could have contributed to the lack of interest from the children, which did not seem to absorb or involve them as they left quickly to play elsewhere. Similar activities with corresponding controlling attitudes from practitioners in Forest School were identified by Maynard (2007a), who suggested that adults, reverted to comfortable and familiar practices out of habit. Such interactions limited children's

independence and autonomy, and as Tovey (2010) suggest lead to the experiences seen here that do not always excite, inspire, or fully engage the children. Another reason for Tom's behaviour could be that even with Forest School training, it was difficult for him to adapt his usual teaching style to the different environment and approach of Forest School, which involves to implementing a child-initiated pedagogy as well as managing the unpredictability of free play, previously identified by Waite and Davis (2007). His behaviour and use of activities that favoured an educational outcome rather than child-initiated play, is a way of balancing Forest School pedagogy with the demands of the EYFS.

Working in Forest Kindergarten all the time, Marc is familiar with the pedagogy and practice, as it clearly relates to his training as an educator, and the pedagogical principles of the DCA. Marc's actions and interactions with the children showed his pedagogical understanding of children's innate motivation to discover, learn and explore and his learner-centred pedagogical approach, which appeared missing from Tom's activity (Wellings, 2012). The way he supported the children's individual needs suggested he was aware of the children's Zone of Proximal Development (ZPD) although his co-constructing interactions and intersubjectivity went much further towards demonstrating that children's individual exploration needs careful nurturing by the adult to extend free play (Jensen, 2011; Swarbrick et al., 2004).

Tom's scaffolding behaviour reinforces Kim's view of children as '*inexperienced*' hence the planned activities. Criticised for being too mechanical by Stone (1993), scaffolding can limit children's independence and autonomy (Maynard, 2007a) rather than empower children in the way that Marc's co-constructing style did (Jordan, 2008). In contrast, Marc's co-constructing style gave the children control, ownership and responsibility of the task (Williams-Siegfredson, 2012), encouraging them to self-manage (Gulløv, 2003), and is in keeping with the Danish view that children should be "free from excessive adult control and supervision" (Wagner, 2003, p.17). Although Marc's behaviour and role could be criticised for being a hands-off approach (Wagner and Einarsdottir, 2006), and lack of adult support could limit the children's experiences (Jensen, 2011), his actions and interactions were closely related to the children's individual needs (Jensen, Brostrom and Hansen, 2010), and children experienced challenges that came out of the environment, and their own motivation to do the activity and were not imposed by Marc.

Although their interactions had different features, during each activity both Tom and Marc talked to the children and it was evident that in both cases each adult had developed warm and

trusting relationships with them. Identified as an important element of Forest Kindergarten by Williams-Siegfredson (2012), Jensen (2011) also recognises the value of relationships, while Brostrom (1998, p.188) goes further and identifies that children should be "socially competent", as it is through social interaction in social contexts the learner gradually internalises their experiences. Further adult child interactions help the children internalise their experiences, and to make meaningful connections which leads to a better understanding, whether through the scaffolding or co-constructing interactions (Jordan, 2008) seen in this study. Therefore, how the adults interact and communicate with children is important in understanding their role in Forest Learning.

The examples provided here of Tom and Marc, show us that it is the adult who based on pedagogical principles and their interpretation of Forest Learning, interprets, defines and then performs their role, which establishes the parameters for social interactions. However, there is a difficult balance to be found between giving children the space and time to develop their own strategies, which helps develop self-regulation (Vygotsky, 1978) or intervening too soon which could limit personal growth. Conversely, adults who distance or detach themselves from the activity and children could have an opposite effect, and cause frustration on the part of the children (Jensen, 2011).

Both Knight (2013) referring to Forest School, and Williams-Siegfredson (2012) writing about Forest Kindergarten, suggest using a style of interaction that uses observation to guide interactions without controlling or dictating, which is reinforced further by Wagner (2006) who states that the dominant style in Forest Kindergarten involves minimal adult supervision and control. At the same time there is a balance to be had between the scaffolding style and co-constructing way of interacting with children with intersubjectivity (Jordan, 2008). So, whether adults are scaffolding children, supporting them in their ZPD or co-constructing understanding through intersubjectivity, all are a critical process (Bruner, 1976) and demonstrate that children's individual exploration needs careful nurturing by the adult to extend free play (Jensen, 2011; Swarbrick et al., 2004).

Although social relationships in Danish kindergarten have been studied by Brostrom, (1998), Kristjansson (2006) and Jensen (2011), Maynard (2007a) mentions that Forest School leaders adopted a scaffolding approach, Williams-Siegfredson (2010, p.37) suggests that the adult is a co-constructor, coach and facilitator, and Waite, Davis and Brown (2006) hint at the co-construction of learning in Forest School, until this study there is no previous research that has made a secure and empirical link between co-construction, intersubjectivity and Forest Learning and applied a constructivist, theoretical perspective to understand the two approaches.

Based on the findings of this study, the adults have demonstrated constructivist pedagogical approaches, although their individual interactions correspond to either scaffolding or co-constructing and are listed in separate sections in figure 6.1. However, this study in agreement with Jordan (2008), recognises that there are interactions that are common to scaffolding and co-constructing, and recommends that skilful adults can move flexibly between these different, yet similar interaction styles and can adapt their approach to suit context, circumstances and the learners individuals needs and the requirements of the activity, resulting in interactions that build on and develop common understanding and shared meaning, as the best way forward for Forest Learning.

6.2.3.2. Bev and Erika

Both Bev and Erika were seen observing, then intervening in children's play. How they observed, the reasons for the intervention, and then how they carried out these actions varied in each context and therefore gives an indication of how each adult interprets their role. In Forest School, Bev's role included her '*observing and supporting children in continuous provision'* which involved monitoring child-initiated play from a fixed position in one side of the outside space. Although Erika was carrying out a similar role in Forest Kindergarten, she moved around the outside space according to what she saw, the children's needs, and her judgement on where she needed to be.

The physical distance between the adult and children in each case could correspond to how the child was been positioned by the adults, as either able to play independently or inexperienced and needing support, which shaped the adult's interventions and subsequent children's experiences (Gulløv, 2003). In addition, the difference in size and scale of each location seen in the maps (Figure 4.1 and 5.1) and aerial photographs (Image 4.1 and 5.1) may have an effect. For example, the larger space in Forest Kindergarten allowed Erika to keep some distance from the children when she observed them playing in the playhouse. Whereas in the smaller space of Forest School, Bev had to be nearer to the children. When each adult intervened, the action of physically moving into the children's play space, their presence as well as their interaction, changed the dynamics of the situation, interrupted the flow of the children's play (Section 5.6.1.2), and shifted the nature and quality of the space (Tovey, 2010).

Erika's approach was to stand back, and watch the children play from a distance which gave the sand boys plenty of space and time to solve any problems for themselves. Erika only

intervened in the group's play when she considered the situation too dangerous to continue for health and safety reasons, which was when the boys dragged the football goal across the doorway of the *legehus*, and on top of the branches then tried to climb over. Erika's watch and wait approach (Wagner and Einarsdottir, 2006) fits with the idea of children being free from excessive control and supervision (Wagner, 2006) while also allowing children space and time to resolve things for themselves before intervening (Davis and Waite, 2007; Maynard, 2007a; 2007b). By comparison, Bev was nearer to the children, and she responded quickly when she saw a 'fallout' between Joe and another boy. Bev's speedy response seemed based on the age of the boys, and her knowledge of the background to this relationship, shows her awareness of the children and her confidence in her relationships with them, as well being aware of me if the quick intervention was for my benefit, rather than as Cree (2009) suggest because she was hovering anxiously over the children. However, although she successfully distracted Joe, the timing of Bev's intervention did not allow the boys to attempt to resolve the situation for themselves.

As the more able other, Bev took control of the situation, but by attempting to resolve the problem for Joe, she scaffolded the less able other by asking him to '*put the puppets in order* and took his power away from him (Bruner, 1976). Although a distraction technique Bev imposed her adult agenda on Joe and was responsible for changing the dynamics of Joe's play from child-initiated to adult-directed (Wood, 2013). By engineering the children's play towards an educational outcome (Kushner, 2007), and 'scaffolding' the less experienced child, until he has mastered a skill or can control his emotions (Bruner, 1976), Bev is also directing the play as well as Joe's social interactions through a one-way power dynamic where she is in control, further reducing any control Joe had (Vygotsky, 1978), whilst Maynard (2007a) suggested intervening too soon could limit children's independence. Although Bev's calm voice showed that she was aware of the children's emotions (Jensen, 2011), her intervention could be attributed to her own concerns or anxieties related to being outside (Tovey, 2010), or as Maynard (2007a) posits as a result of over-vigilance due to different and somewhat unfamiliar context.

Informed by her observation, when Erika intervened she talked briefly with the group and then left the boys to resolve the matter for themselves, her action went some way towards returning the 'status quo' or power in the play back to the boys after the initial intervention. Using a co-constructing style of interaction Erika uses her understanding of how children think, her existing relationships with the group and knowledge of the boys, to engage the boys in joint problem solving or intersubjectivity (Jordan, 2008). Erika's style of interaction where she

adopts a listening approach that is similar to Marc's and is not authoritative or dominating. Rather than imposing her view onto the boys, like Bev's scaffolding style, Erika acknowledges the boy's expertise, includes their ideas as part of the resolution and then leaves them to resolve it, while she returns to observing them from a distance. Erika's interaction is representative of a more equal power balance that is empowering rather than controlling, as it leaves the final decision and action up to the boys (Olusoga, 2014). The sand boy's play was adventurous, and Erika's mediated the play, through an intersubjectivity or a shared understanding (Jordan, 2008) created between her and the boys, that simultaneously encouraged them to recognise any possible danger, while at the same time allowed the boys space and time to push their own boundaries and problem solve.

In addition, the boys were engaged in the process of the resolution and active in the outcome (Vygotsky, 1978). Although Erika finally stepped in, her approach of not intervening or interrupting gave the children time and space to try things out for themselves, that created and maintained an environment that was conducive to children having control and ownership of their play (Wood, 2010), while at the same time when she did intervene she supported the children without overly disrupting them, which long term is also equipping them with the skills to resolve future situations for themselves. Although Bev's scaffolding approach also solves the immediate problem short term, and the one-way power dynamic is less effective at involving the less able in the resolution process when compared with Erika's. By not negotiating or modelling a negotiation, Bev has not fully engaged the boys in the process and has not equipped them to begin to develop their own solutions or prepared them for future situations. By acknowledging what children *can* do rather than what they cannot, Erika is empowering the child, a view which to some extent is based on the adults different interpretations of the child, theoretical understanding of how children learn and the dominant pedagogy of Forest Learning which combines to inform their view on their role, and in turn shape the children's different experiences (Gulløv, 2003).

Social interactions help children to internalise their experiences, and make meaningful connections, which leads to a better understanding of themselves and others, and it is through sensitive interactions that focus on the development of relationships that mediates children's play and learning (Vygotsky, 1978). The difference in interactions identified in this study lies in the adult giving the children time and space to resolve a problem for themselves, or resolving the problem *with* them so they can start to do it for themselves, where Erika empowers them through a two-way intersubjectivity and co-construction (Jordan, 2008) compared with the

scaffolding approach favoured by Bev with limited one-way idea and power sharing which resolves the situation *for* the children (Jordan, 2008). Both approaches are suitable for Forest Learning.

6.2.4 Summary

Adult's interpretations and enactment of Forest Learning are summarised here and set out in figure 6.1. There were many similarities between the two cases and are presented in the middle section of figure 6.1. This section has set out a range of factors, such as planning, play and interaction style, that were identified in this study as contributing to adult's interpretation of Forest Learning, and that have shaped each construction of a Forest Learning environment. Each case operated with a similar routine which was initiated by the adults to give some structure to the session. With lunch as the only official interval in Forest Kindergarten the children developed their own routine through their play choices, in particular where they played, what they played, what resources they used, and who they played with. Similarly, in Forest School children preferred to play the same play, in the same places, such as the playhouse. The daily visits to Forest Kindergarten and the less frequent but regular weekly visits created familiarity with the environment.

Less time spent in Forest School created a need for practitioners to provide different or special activities that resulted in planned, focus activities and continuous provision. By planning provision, the practitioners limited the children's choices and removed some autonomy, however the children in the study still initiated their own play and adapted resources to suit their play stories. The pedagogy of child-initiated play in Forest Kindergarten placed an emphasis on the children's innate ability to motive their own play and there was no perceived need by pedagogues to plan activities or provide resources. In both cases children found and used resources creatively to suit their play stories. Even though children in Forest School were viewed by practitioners as inexperienced in playing outside compared with pedagogues' views of children in Forest Kindergarten, they still showed initiation in their play. Play in both cases centred around their favourite places, which were typically away from adults.

There were also some distinct differences between the two cases, and these are presented in separate sections of figure 6.1. The practitioner's main approach to Forest School was to

scaffold learning *for* children, whereas the central approach of pedagogues in Forest Kindergarten was to co-construct learning *with* children. The one-way power dynamic was demonstrated by both Tom and Bev, whereas Marc and Erika both demonstrated a two-way intersubjectivity that was empowering for the children. Erika and Marc preferred to use a minimal style of supervision that focused on the process of the activity and the children's active engagement in it, while Bev and Tom's scaffolding approach involved more instruction and supervision. Even though children were active in the activity, the interactions focused on educational outcomes. Physical space could play a part in these differences and this is explored in more detail in section 6.4.

Applying a constructivist lens to this study, helps to understand how the adults in each context interpret and perform a pedagogy of Forest Learning differently, as scaffolding or co-constructing, which informs their role and actions in each case. In turn adult's enactment of pedagogy has influenced how each Forest Learning environment was constructed, and resulted in different learning environments, that then have affected the children's experiences. This study finds that adults need to be comfortable with children having ownership and control of their play where they make decisions about what they play, who they play with and where they play. Pedagogical decisions were based on a theoretical understanding of how children learn through play, the process of child-initiated play is foremost, whereas in Forest School there was a stronger emphasis on curriculum and an educational outcome. A central part finding of this study, that has not previously been identified in earlier research, is the use of a constructivist pedagogical approach that in Forest School involved practitioners scaffolding *for* children, whereas in Forest Kindergarten pedagogues preferred co-constructing *with* children, and through intersubjectivity empowered children through child-initiated play. Children's experiences including child-initiated play are looked at next.

6.3 Children's experiences

Children's experiences are closely connected to the adult's interpretation and their enactment of Forest Learning pedagogy. This section uses findings from the data and themes set out in a thematic map (Appendix 13), to explore children's experiences in relation to the places where children choose to play, the kind of play they participate in, whether that play is child-initiated or adult planned, including the roles and narratives they create, the resources used, as well as their social interactions. The areas that are common to both cases are presented in the centre

section of figure 6.1, whereas areas that are unique to each case are recorded in the section corresponding to either Forest School or Forest Kindergarten.

6.3.1 Places where children play

At the start of each session, as part of the routine both pedagogues and practitioners encouraged the children to choose where to play and what to play with. During each session or day, the children carry on making decisions about their play, which is a characteristic of child-initiated play (Wood, 2013). In Forest School the places children chose were from continuous provision, rather than a planned activity and in both cases the children selected places where they could initiate play without adults.

Selected by all the child participants in both cases, the playhouse was the most popular place for children to play and both Erika and Kim agreed that children frequently played there. The location and the features of each playhouse were similar, as each was located near to the perimeter of each site, and away from the building and can be seen on the maps (Figure 4.1 and 5.1). In Forest School, the playhouse was open with big 'windows' and no door (Image 5.9), whereas in Forest Kindergarten, the playhouse was enclosed with no windows or door (Image 4.10). Both shed like structures gave the illusion that when inside the children would be concealed from view. Although Kim reassured me that '*we can see them through the window'*, the playhouse was far enough away from other children and an adult's gaze, especially with the scale of Forest Kindergarten to afford some privacy and seclusion (Tovey, 2010).

In this study the children from both cases preferred to play in the secluded playhouse where they could initiate their own play (Tovey, 2010), make their own decisions, and control the narrative of the play (Wood, 2010), away from adults who could intervene and limit their independence and autonomy (Maynard, 2007a), without "excessive control and supervision" (Wagner, 2006, p.292). Therefore, the preferred way of children to experience Forest Learning is in places away from adults where they can initiate their own play.

6.3.2 Play

Explained by Erika as '*set plays'* the children in both cases had patterns in their play that corresponded to them frequently playing in a favourite place, such as the playhouse, repeating a particular play in a specific place, or repeating the same play in different places. In addition, the children were seen playing with favourite resources such as Joe with the puppets, and the

sand boys in the sand. In both cases the fixed places such as the playhouse were a familiar feature that provided a secure base from which the children could explore, or a focus for the play (Tovey, 2010). Alternatively, using the same play narrative provides a familiar starting point from which the children can repeat play that then evolves and adapts to any changing circumstances. Repetition in play, is part of an important learning process for children to develop their understanding and to construct meaning (Vygotsky, 1978).

Both Erika and Kim were aware of children's preferences (Section 5.6.1), particularly as the playhouse had a '*multi-use*', and the children played different kinds of games in there, such as the fairy girls playing mums and babies, or the sand boys playing superheroes. Kim also knew that Caitlin liked to collect bugs, and that Joe liked to play with the puppets, so she regularly included these favourite resources and activities in her planning. Depending on children's preferences the affordance of the place offered something that motivated, enhanced, or drove the play such as the privacy afforded by the playhouse (Heft,1988). By frequently playing in their favourite, fixed places, the children showed that they have a strong connection or relationship with that place (Tovey, 2010), whilst familiarity with the place provided security that encouraged play to be initiated based on their interests and build on previous experiences so children can branch out and extend their experiences and understanding (Bruce, 1991; Vygotsky, 1978).

Children attend Forest Kindergarten every day, so they are familiar with their environment, whereas in Forest School, even though the children played for lengthy periods of time, the visits were only weekly. The weekly sessions did not allow for children to return later that day or the next day to complete a task, whereas the extended time and frequency of visits identified in Forest Kindergarten, meant that more time was available for children to play for longer. To counteract any unfamiliarity generated by the weekly sessions Kim provides an opportunity for children to independently revisit previous adult focus activities, through continuous provision resources making the activities familiar. For example, Caitlin uses the skills she has learned previously in an adult focus bug hunting activity, to collect bugs for her imaginary role play, however, rather than being involved in an activity that had been adult planned, Caitlin used the resources to initiate her own activity (Wood, 2010), adapting the resources to suit her own play and purpose.

The on-going nature of learning in Forest Kindergarten is perpetuated by not having a formal tidy-up time, meaning that children are able to leave their resources, activities and equipment, and provides a further opportunity to return later or the next day, to continue, extend, finish and repeat their play. Even though Forest School and Forest Kindergarten are organised differently,

children were seen to make choices and decisions about their play, although the degree of autonomy differed in relation to the structure imposed by the adults. However, in both cases it was useful for the adults to be able to predict children's play habits, as it resulted in playing outside being more predictable and therefore less risky than Kim suggested.

Sessions in both cases were regular, as advocated by Eastwood and Mitchell (2003) and Massey (2002), and although either weekly in Forest School, or daily in Forest Kindergarten, the difference in each context as identified by Murray and O'Brien (2005) O'Brien and Murray (2006) can produce different experiences and outcomes. This study found that regularity and frequency provided scope for the children to play in their favourite places and repeat their favourite play in future days or weeks. By returning and repeating play in familiar places, allows the children to build on prior experiences and consolidate their understanding (Vygostky, 1978; Williams-Siegfredson, 2012), and children's play is extended through naturally occurring differences rather than those imposed (Knight, 2013).

6.3.3 Child initiated play

In Forest Kindergarten, the pedagogues did not plan activities or put out resources, so the children were seen initiating their own play, using props and natural resources to enhance their play, whereas in Forest School the children experienced a mixture of planned, adult-initiated activities (Section 5.5.4) and continuous provision that was playful (Section 5.6.2) set up by the practitioners. Given that a similar pattern over the balance between practitioner planned and led focus activities was identified by Waite and Davis (2007), there was a concern that there might be no space in Forest School for the children to initiate their own play, so it is interesting that in this study Joe and Caitlin did initiate their own play (Wood, 2010).

Supported by literature (Eastwood and Mitchell, 2003; Massey, 2002; Williams-Siegfredson, 2012), child-initiated play is a defining principle of Forest Learning, while Vygotsky (1978) considers the initiation of play by children central to providing play experiences that support the construction of meaning. Although practice varied between the two cases, with some structure and control imposed by practitioners in Forest School (Murray and O'Brien, 2005; O'Brien and Murray, 2006; Waite, Davis and Brown, 2006), whereas in Forest Kindergarten with almost no schedule, and without supervision (Wagner, 2006), the pedagogical aim is for children to "play what they like" (Sandseter, 2014, p.115). Although this study saw that children from both cases initiated play, the degree of child-initiation is dependent on the adult's understanding of underpinning theoretical perspectives, as well as their personal experience

and confidence, previously identified in Forest School by Mackinder (2017), which combine to form a pedagogy of Forest Learning.

In Forest School, high levels of adult supervision, monitoring and intervention meant that there was only some child-initiation of play, whereas in Forest Kindergarten where there was minimal adult supervision the children initiated all of their play. In addition, the children from both cases, albeit by different degrees, demonstrated choice, control and imagination in their play, and what is of interest is that even with a high degree of adult planned activities and resources, both Joe and Caitlin initiated their own play and used the resources in their own ways. The main difference between the amount of child-initiated play in the two cases seems related to a different interpretation and subsequent enactment of pedagogy through the adult roles in each setting.

6.3.4 Roles and narrative in play

All the play observed involved the children taking on imaginary roles. Both Caitlin's and the fairy girls '*set play*' had a similar narrative around families or mums and babies, and similarly, Joe took on the role of chicken licken, and the sand boys became superheroes. In play, especially when it is child-initiated, children can take on roles without the constraints of reality and they can explore their experiences and feelings (Meckley, 2002). The role play seen in both cases was supported by play stories or narratives that the children had constructed and performed giving the play some structure and focus (Pellegrini, 1991). Depending on children's preferences the narrative of the play, the affordance of the place or both seemed to motivate them to play, while also driving the play. In addition, by frequently playing in their favourite places the children have a familiar base from which they can follow their interests, experiment, explore, and build on previous learning (Bruce, 1991; Vygotsky, 1978). Children in both cases also used resources or props in their play to support the narrative, which gives the play deeper meaning (Vygotsky, 1978).

6.3.5 Resources in play

In both cases Joe, Caitlin, the fairy girls and the sand boys all searched for specific equipment such as the puppets or sand tools, and moved resources in their play, for example Joe moved the puppets, whereas the fairy girls and the sand boys transformed the playhouse to suit their own play, like setting a theatre stage or marking their territory (Image 4.11 and 4.12). By

moving large pieces of equipment out of the playhouse, such as the table that had been left there by previous occupants, and bringing in 'new' equipment, for example a football goal and logs according to the needs of their play, they were showing others that they were occupying, and in control of the space (Tovey, 2010). Although more apparent in Forest Kindergarten, both examples demonstrate how the children imposed their own ideas on the space, and controlled the place adapting it to suit their play narrative. In Forest School, even though the practitioners act of setting out resources in various spaces initially defined the space with their intended use of it, both Caitlin and Joe (Section 5.6.2) similar to the fairy girls and sand boys, made the play space their own, by moving the resources to suit their own play, the children are simultaneously making decisions about their play, and taking away control from the adults or other children who put them there.

Transforming the space for their own play demonstrated the children's attempt at ownership and control of both the play and the place, and gave meaning to it, rather than any meaning that may have been assigned by the adults (Tovey, 2010). The act of rearranging the equipment became an integral and almost ritualistic part to the play, with the space taking shape as the children inhabited it (Tovey, 2010). In addition, ownership of the props is a further sign of occupation and dominance over the space, as well as an indicator of the kind of play being played. For example, control of a specific prop such as the spade or puppets is used to identify their individual role, or membership of a group. Making decisions and having control of the play is characteristic of child-initiated play (Wood, 2010), however, the study showed that control and ownership of the space is only temporary as the place will be used differently by other groups who will repurpose it for their own play. Children and adults use of space in Forest School has not been extensively researched elsewhere so a full understanding of what was happening in this context is limited and demands further exploration.

In Forest School there were plenty of resources including jigsaws, books, and puppets, that had been set up by the practitioners, whereas in Forest Kindergarten the children located equipment when they needed it, for example the knives for whittling. However, in both cases there were examples of the children locating items needed for their play, or example the fairy girls looked for chalk and Caitlin hunted for bugs. By providing resources as part of continuous provision the practitioners are providing some familiarity which encourages the children to build on their experiences, however the pre-selection of resources by practitioners is also a way of controlling or scaffolding children's exposure to activities and resources, which can limit the experience on offer (Tovey, 2010). However, in both cases where resources were 'freely chosen' (Wood, 2010, p.20), children could make their own decisions regarding play props or tools and use

natural resources such as using sticks as mobile phones (Knight, 2012; Murray and O'Brien, 2005; O'Brien and Murray, 2006; Tovey, 2010), resulting in children who are resourceful and inventive, and demonstrate imagination and creativity in their use of natural resources especially when they are immersed in the flow of their play (Vygotsky, 1978).

6.3.6 Social interactions

It was established earlier that children's play in both cases was away from adults. In Forest Kindergarten, as children's play involved other children or friends it was difficult to separate the individual child participants from the group, so the behaviour of each group was studied as part of this project. Each group had a clear identity, for example the fairy girls gave themselves the name. Conversely, in Forest School, Joe, aged 3 years 6 months, and Caitlin, aged 4 years and 1 month, were observed playing on their own, which is typical of children younger than their chronological age (Parten, 1932). Even though Caitlin talked about '*playing with her friends*' there was no evidence of this during the study, and while her decision to play in the mud-kitchen, away from the main hub of activity (Figure 5.1) took her away from adults, it also took her away from her peers and resulted in solitary play with limited opportunities for social interactions.

Although members of a group, the Forest Kindergarten children were not always seen playing together, for example sometimes the sand boys played alongside each other in parallel play (Parten, 1932), whereas the fairy girls split into two smaller sub-groups. Each group had its own rules, boundaries and a social hierarchy that related to the social world of their play and roles, binding the group together (Vygotsky, 1978). Depending on their age the fairy girls played inside or outside the house as mums and babies with clearly defined roles, whilst the sand boys social hierarchy was related to their digging skill, their ability to use a tool, and the ownership of an important tool, such as the spade. Both group's play was associative as they were starting to form social relationships, which is typical for children of 3 to 4 ½ years old (Parten, 1932). By agreeing over the theme of the play, and following a play story, the play was also co-operative and more typical of children aged 5 years old (Parten, 1932). Also typical of co-operative play the children occasionally shared items, and the fairy girls used play narrative that evolved during the play (Parten, 1932). Lastly, all the children from both cases made their own rules, which set the parameters of their play, and in the case of the groups required some negotiation to reach agreement (Jordan, 2008).

Solitary play such as Caitlin's and Joe's is not inferior to the associative or co-operative play of the fairy girls and sand boys (Vygotsky, 1978; Bruce, 1991; Tovey, 2010), as it is valuable for children to take time to think and reflect without the pressure from playing with other children, and so develop their independence. In addition, Caitlin's 'families' play revealed her rehearsing the role of mum feeding her babies (Bruce, 1991), and socially engaging with the props as part of the pretend play narrative, which are social interactions and similar to the fairy girls associative play (Parten, 1932).

The whittling activity in Forest Kindergarten involved a group of children, albeit working individually, but what is interesting about this activity is that two boys stood out as 'experts' as most of the others watched them at different times as they whittled, before returning to work on their own stick. Rather than scaffolding as suggested by Williams-Siegfredson (2012), the more able children were able to support the less able through a co-constructed, intersubjective, shared understanding that did not involve Marc (Jordan, 2008). Although positioned as an 'expert', without an agenda or educational outcome in mind (Jordan, 2008), the boys were not intentionally teaching (Bruner, 1976), but rather modelling the technique that was then mirrored by the less able other (Chi, 1996). Even though this behaviour could generate a skill hierarchy between expert whittlers and novices, it did not appear to because of the intersubjective, symmetrical power balance, that was empowering for the children (Jordan, 2008). Further, the co-construction seen in Forest Kindergarten does not appear to be limited to adult child interactions, as similar interactions were seen between children, which could be attributed to the influence of the older children who act as role models for the younger children to watch, copy, and learn from.

A significant feature of the Forest Kindergarten was that the children were aged between 3 and 6 years, as opposed to the children in Forest School, who were aged between 3 and 4 years. As mentioned earlier and although not an anticipated part of this study, the individual and groups observed in Forest Kindergarten revealed noteworthy interactions and behaviours, in particular, the fairy girls and the sand boys who played in mixed age groups, and demonstrated behaviours such as negotiation, the use of rules, and roles were clearly assigned according to age and ability, which is more typical of co-operative play and usual for children aged between 5 to 6 years (Parten, 1932). Both examples in Forest Kindergarten show the younger children (3 and 4 years old) are behaving slightly above their age in relation to their play stage (Parten, 1932), which could be attributed to the mixed age group play and the behaviour being modelled by the older children. Given that this was not an anticipated area of study, and the time constraints of this project it was not possible to compare these findings with data from Forest School,

especially as the children in Forest School do not work in mixed age groups and did not play in groups when the data was collected.

Vygotsky (1978) posits that learning is a social experience, and while claims have been made in both Forest School and Forest Kindergarten literature that Forest Learning supports the development of children's social skills (Cree, 2009; Knight, 2009; Swarbrick et al., 2004; Wellings, 2012; Williams-Siegfredson, 2012), in Joe and Caitlin's play there was less evidence to support this, as playing away from adults also took them away from their peers. Conversely, observation of fairy girls and sand boys in Forest Kindergarten showed that play in secluded places, away from adults encouraged children to interact socially (Tovey, 2010), as well as experience themselves as "autonomous" (Gulløv, 2003, p. 25), which confirms Jensen's (2011) claim that the social element of play is prioritised by pedagogues and Kristjansson's (2006, p.21) finding that playing with friends is viewed as developmentally significant and "equal to or better than instruction from adults". However, facilitated by pedagogues, who stood back and only used minimal supervision, children also learned to rely on each other as part of a group. Here the pedagogues main role was to co-construct a learning environment *with* children (Jordan, 2008), where they support each other "in collaboration" (Brostrom, 1998, p.118), and create a social world with their peers (Jensen, 2011; Brostrom et al., 2012). In contrast the examples of practitioners provided in Forest School, such as Tom's focus activity and Bev's intervention show how they scaffold learning *for* children (Jordan, 2008), and using a transmission model (Wood and Attfield, 2005), place emphasis on educational outcomes with a one-way power balance, with a specific agenda or educational outcomes in mind (Jordan, 2008).

Using a constructivist perspective this study has refined the existing understanding of adult's roles by identifying that pedagogues and practitioners use a different style of interaction. While both are constructivist the pedagogue, using a symmetrical power balance stands back from the children to allow them initiate their own play, with "little direct intervention" from adults (Wood, 2010, p.20) which fits as a co-construction rather than the scaffolding style of interaction suggested by Williams-Siegfredson (2012). This finding indicates a different pedagogical understanding of Forest Learning depending on how the learning environment is constructed, with pedagogues co-constructing a learning environment *with* children through a shared understanding and meaning or intersubjectivity, whereas practitioners create a learning environment where they scaffold learning *for* children (Jordan, 2008).

6.3.7 Summary

Children's experiences of Forest Learning are summarised here and set out in figure 6.1. There were many similarities between the two cases explored here and these common elements are presented in the middle section of figure 6.1. Children in both Forest School and Forest Kindergarten chose similar places to play such as the playhouse, which were away from adults, and not planned activities. Frequent visits, daily in Forest Kindergarten and weekly in Forest School afforded familiarity with the environment and provided security from which children could play and explore in their favourite places. Play also involved a degree of repetition, either provided by practitioners or initiated by the children as they returned to favourite places and repeated play stories.

Although the practitioners planned activities and resources in Forest School, children from both cases initiated their own play, and there were many examples of how the children made decisions and controlled their play, for example by using resources in their own way, such as locating the knives they needed to whittle sticks, using bugs found under logs as babies in imaginary play, and dragging large pieces of equipment into the playhouse to transform it for their play story. Child-initiated play was identified in both Forest Kindergarten and Forest School, which supports the findings from previous studies (Eastwood and Mitchell, 2003; Massey, 2002; Williams-Siegfredson, 2012), that child-initiated play is a unique aspect of Forest Learning. However, there were also some distinct differences between the two cases, and these are presented in separate sections of figure 6.1. In playing away from adults the Forest School children were also away from their peers, and with only limited examples of social play overall the play was solitary. In contrast, the children in Forest Kindergarten played in mixed age groups, and there was a shared understanding or co-construction where pedagogues supported children to learn from each other, resulting in play that was more social.

Although this study was focused on children aged 3 and 4, the groups in Forest Kindergarten involved children aged between 3 and 6 years old. This created opportunities for the younger children to learn from the older children, as well as the less able learning from the more able in the whittling activity. The social aspect of learning was highlighted further in the Forest Kindergarten case, with the pedagogues actively encouraging children to support each other and creating a climate of intersubjectivity to support this. Practitioners in Forest School preferred to support or scaffold the children themselves by providing activities and resources.

A main difference between practitioner's and pedagogue's interpretations and enactment of Forest Learning is that the pedagogues co-constructed the learning environment *with* children, whereas the practitioners scaffolded the experience *for* children through focus activities and planned continuous provision. Reinforcing this difference further, the pedagogue's active encouragement of friendships among children means that they can rely on each other for support rather than needing adults, which aligns with the minimal supervision seen in this study, an approach not identified in the Forest School practitioners. To conclude a link was identified between the pedagogical aims and the pedagogue's co-construction and inter-subjectivity that was missing from Forest School because of the scaffolding pedagogical approach adopted. Consequently, the children's experiences of Forest School and Forest Kindergarten were influenced by different adult interpretations and enactments of their role. The next section looks at the environment.

6.4. The environment

The theme used in explore the environment have been drawn from the data be seen on the thematic map (Appendix 13). Consequently, this section is made up of the physical location, natural features, and natural resources, alongside fixed equipment, and then open spaces. Risk has also been included in this section because of its association with the outside environment. It is important that the factors relating to the environment are not viewed in isolation but considered in relation to the themes explored earlier relating to the adult and child, as the adults in each context have interpreted and enacted a pedagogy of Forest Learning, which is central to the construction of the learning environment (Sandseter, 2009) and both influence children's experiences and so links across these three areas are made explicit. Combined in figure 6.1 the similarities have been presented in the middle section, whilst the differences of each environment have been summarised in separate sections that correspond to either Forest School or Forest Kindergarten.

6.4.1 Physical location

Forest School and Forest Kindergarten both happened outside, and each site had its own unique qualities that related to their naturally occurring features. The Forest School site had 6 trees which is not enough to be regarded as a wood (Image 5.1), whereas, the Forest Kindergarten site had many trees in it and a large Forest within walking distance (Image 4.1). In Denmark, there are many names for early years provision that embrace different locations in different

ways, of which Forest Kindergarten is just one (Williams-Siegfredson, 2012). The name Forest Kindergarten or *skøvbornehaven* clearly indicates that it happens in a forest, whereas in Forest School there is some disagreement over the location, as even though early studies identified that Forest School took place in or near a wood (Eastwood and Mitchell, 2003; Massey, 2002), Knight (2012, p.2) caused some confusion by suggesting that although using a woodland is "preferable" Forest School can take place anywhere outside (Knight, 2012, p.15). In both contexts the outside environment is a defining feature (Gulløv, 2003; Knight, 2009; Williams-Siegfredson, 2012) and therefore central to Forest Learning. As the name suggests a forest or at least trees are an important part of the Forest School environment, and given their use for climbing, dens, and resources such as sticks and leaves, a Forest School without trees would be a move away from the Danish Forest Kindergarten seen here and from previous research.

6.4.2 Natural features

The outside environment provides many unique, natural features, such as trees, slopes and grass and is a valuable resource (Knight, 2013; Williams-Siegfredson, 2012). Children in both cases used the natural features in their play, for example in Forest Kindergarten, the fairy girls used trees and bushes for climbing, hiding and den building (Image 4.13). In Forest School the pine trees were not suitable for climbing, so the shrubs and bushes were used as dens. Consequently, the different locations in each case affords different experiences, benefits, and outcomes as previously identified by Davis and Waite (2005). In Forest School, the adult planned activities, for example the ball painting activity did not occur spontaneously out of the natural environment in the same way that the whittling activity did in Forest Kindergarten, where children were immersed in their physical environment so play evolved out of their interaction with the environment and through its natural features (Gulløv, 2003). In Forest Kindergarten an important social and pedagogical aim is that children and adults engage *with* and learn *through* the experience of being outside, in nature (Einarsdottir, 2007; Gulløv, 2003). Forest Kindergarten is about the process or experience of being *in nature*, that opens-up possibilities, and viewed as a resource by pedagogues, the outside environment was a blank canvass with many natural attributes, waiting for children to experience, interpret and use it how they choose. In Forest School, possibly because of the affordance of the type of trees available, the outside environment was seen more as a backdrop to learning. Even though the practitioners brought in sticks for children to play with (Image 5.3), the idea of the natural environment being central to play and learning outside posited by Tovey (2010) was not embraced in the same way by practitioners when compared with the pedagogues in Forest Kindergarten. The difference in

how the environment is interpreted by adults impact on the degree of spontaneity and limit the opportunities of child-initiated play which could contribute to the difference in children's experiences seen in this study and other similar studies such as Davis and Waite (2005).

6.4.3 Natural resources

In Forest School, resources were set out by practitioners, and because the pine trees did not produce sticks, they were sourced and provided by the practitioners (Image 5.3). In contrast, the pedagogues allowed the children to decide what to play with and where, and to locate resources as they needed them, which is central to child-initiated play (Wood, 2010) and identified by Williams-Siegfredson (2007) as a key characteristic of Forest Kindergarten. Even though resources were provided by the practitioners in Forest School, in both cases the children sourced natural items such as branches, sticks, and leaves for their play. Caitlin used leaves for cooking and collected bugs to use as babies, whereas in Forest Kindergarten the fairy girls used sticks as phones, which as mentioned earlier is a defining characteristic of child-initiated play (Wood, 2010). The process of locating or adapting natural alternatives for items encouraged the children to be resourceful and creative which leads to self-sufficiency and is encouraged by pedagogues in Forest Kindergarten (Gulløv, 2003; Williams-Siegfredson, 2012). Showing the children were active learners (Meckley, 2002) who made decisions and demonstrated control in their play (Williams-Siegfredson, 2012), the children tailored their play to suit the environment and the resources available (Tovey, 2010), and adapted resources to suit their play as they assigned their own meaning to them (Vygotsky, 1978).

Pedagogues actively encouraged children to develop relationships and friendships that support their autonomous play away from adults, whereas practitioners did not prioritise social interactions in the same pedagogical way. Even though children have free will and Joe *chose* to play with the puppets, by planning and providing the toys, such as the puppets in the playhouse the practitioners were demonstrating a limited two-way power process, (Jordan, 2008) that scaffolded Joe, and directed him to use what they had provided (Bruner, 1976), with a specific outcome in mind (Chi,1996). Despite Kim knowing that the children enjoyed playing with the puppets, her action and intention shifts the emphasis from child-initiated play to an adult-initiated 'playful' activity (Wood, 2010). Alternatively, by choosing and then sourcing the items they needed for their mums and babies play and then setting-up the playhouse to suit their play story, the fairy girls demonstrated ownership of their play (Wood, 2010) as they were actively engaged in the process (Meckley, 2002). Although their play may have the same

repetitive nature as Joe and Caitlin, they were freely selecting resources and modifying what they found to suit their play. Child-initiated play in Forest Kindergarten, was part of the pedagogue's pedagogical aims they co-constructed the environment *with* children (Jordan, 2008), and how spaces were used was not pre-determined or codified by the pedagogues, as it was in Forest School with the placement of resources but acted on and in by the children.

The play seen in both cases took place in different locations and environments where boundaries were established differently by the adults concerned. In Forest School the children's play took place in an environment where the practitioners used a one-way or limited two-way power process, and scaffolded experiences *for* children (Jordan, 2008). In contrast, the children in Forest Kindergarten experienced an environment where the pedagogues use a two-way symmetrical power process that involved the children more actively in the process as adult co-constructed the experiences *with* children (Jordan, 2008). In Forest School there was less room for children to make autonomous choices, however, Joe and Caitlin resisted the practitioners attempts at scaffolding and initiated their own play, with Caitlin locating for her own resources, and both using adult provided items in their own way showing they had the ability and power to direct their own play (Wood, 2010). In Forest Kindergarten minimal supervision and interventions (Wagner, 2006), meant that the children had more space to initiate their own play, and although they had to search for the resources that they needed, they adapted found items creatively for use in their play, for example the fairy girls hunted for chalk and sticks that they used sticks as mobile phones.

6.4.4 The use of fixed equipment

While exact measurements are not available, the photographs show that the Forest Kindergarten (Image 4.1.) site is far larger than the Forest School site (Image 5.1). Although the Forest Kindergarten is larger it accommodates up to 180 children, compared with only 26 children using the Forest School. Beyond the natural resources found in the outside environment each site contains a range of fixed equipment such as playhouses (Figure 4.1 and 5.1), that have been chosen and positioned by adults, although the practitioners and pedagogues viewed the playhouse differently. Although the Forest Kindergarten site did not look full it had more varied equipment compared with the Forest School, which contained a lot equipment. Both sites have fixed equipment in common, such as the sand box, climbing frame and playhouse, and from the equipment available in each case the children from both cases selected similar places as

'favourites', such as the playhouse. While the children's play had some features in common such as repetition of play in favourite places, other aspects were different from example, the freedom and autonomy experienced through play. Therefore, the adult's interpretations of Forest learning, in each context coupled with the affordance, scale and flexibility of the place provides different play opportunities for the children to experience (Tovey, 2010).

6.4.5 Open spaces

As well as the natural resources and fixed equipment, this study found that both sites had space with no equipment in it, or 'open-spaces'. Across the two cases the open space was interpreted and used differently by adults and children. In Forest Kindergarten, the size and scale (Image 4.1) meant there was a lot of open space, or places without natural features or fixed equipment. Children had the freedom to access all areas of the site, apart from the chicken coop because it was fenced off. Children had similar access to all areas in Forest School, which although smaller in size (Image 5.1) also had spaces that did not contain fixed equipment. However, the practitioners filled the open spaces with resources or an activity, which assigned a use or meaning to it and resulted in less space available for the children to run and move freely (Tovey, 2010). Children were also told by practitioners not to run. In contrast, the pedagogues in Forest Kindergarten, by not allocating a specific purpose to a place, allowed children the opportunity to use the space as they choose as part of free play (Tovey, 2010; Wood, 2010). For example, run or move freely and play games such as football, chase, hide and seek, which supported physical development (Tovey, 2010). Additionally, in Forest School, the practitioners physically occupied the space in an attempt to control it, while, the pedagogues more relaxed attitude meant they kept some distance from the children, which gave them space to learn for themselves. The adults in each case interpreted and constructed the outside space differently, which directly influenced children's experiences. One possible reason for the difference in adults' interpretation of the physical space could be related to their perception of the outside as unpredictable or risky.

6.4.6 Interpretation of risk

In Forest Kindergarten, Erika was comfortable with children playing outside and the potential for danger (Sandseter, 2009; Williams-Siegfredson, 2012). Her attitude towards children

climbing trees was relaxed and appeared to be based on a positive view of risk, where children were positioned as competent and able. She saw exposure to risk a part of everyday life, necessary for healthy child development, integral to outside play and synonymous with Forest Learning (Knight, 2013; Williams-Siegfredson, 2012). This positive view of risk was reflected in Oska and Anneka who chose to climb trees, without adult supervision as part of their play.

In Forest School, Kim mentioned continuous provision is a way for children to self-regulate, although she was concerned over the danger involved with children climbing a buddlia bush and their risk of falling, which appears to be based on positioning children as vulnerable and inexperienced, and reflects a negative view of risk. The outcome was that children were only allowed to climb with adult supervision, and during the photo tours the three children did not mention climbing trees. Kim managed risk through rules that were clearly defined and articulated at the start of the session (Section 5.2.2), alongside planned activities and structured play which reinforced the structure of the session, while control was maintained through close monitoring by practitioners. Scaffolding experiences *for* children (Jordan, 2008), perpetuates a negative view of some activities as dangerous (Sandseter, 2009), limiting children's ability to choose and make decisions and restrict their autonomy (Wood, 2010). Regardless of practitioner's interventions, children were seen exploring on their own although they did not have the experiences of learning *with* other children, which was evident in Forest Kindergarten.

Initially, the children's play in Forest Kindergarten, appeared chaotic, unorganised, unpredictable, or even dangerous, but when viewed as Erika's "set plays", behaviours became more predictable (Section 4.2.2). Acknowledging that children learn in social worlds (Vygotsky, 1967), the pedagogues get to know the children, their interests and their capabilities through social interactions that over time build relationships and helps inform their future interactions (Kristjansson, 2006). Children are also encouraged to build relationships with their peers and play in social groups, which as we saw in section 6.3 the younger or less able children learn from the older or more able children.

Though a shared understanding intersubjectivity is co-constructed *between* the children and pedagogues and among children, that contributes to the acceptance of adventurous or 'risky' activities, and exposure to risk as positive. Through a symmetrical power balance (Jordan, 2008), pedagogues consider the children's needs and perspectives (Jensen, Brostrom, and Hansen, 2010), and do not impose their ideas on children, rather they give them time and space (Maynard, 2007a; Williams-Siegfredson, 2007), without excessive supervision (Wagner, 2006) that is maintained through careful observation (Williams-Siegfredson, 2012). The children through child-initiated play explored and experimented to find their own way, supporting each

other and develop their own rules and boundaries. By playing in groups the more able or older children were able to also assist children in playing autonomously, supporting each other which is especially useful in adventurous activities, while the pedagogue's knowledge and actions perpetuate a positive view of risk (Sandseter, 2009) that enables children's exposure to risk (Kristjansson, 2006).

This study has identified that in the two cases the adults interpret and enact Forest School or Forest Kindergarten in different ways, which broadly corresponds to children's exposure to, and experience of risk (Sandseter, 2009). Different adult perceptions of risk identified in this data can be a reflection on the social values in each context, and also representative of personal perception of risk and danger Using a constructivist lens reveals that in Forest School practitioners scaffold learning *for* children (Jordan, 2008), which protects them from exposure to dangerous activities and risk. Alternatively, pedagogues co-construct experiences *with* children which actively encourages children to explore and experiment which exposes them to elements of risk and adventurous play and is viewed as an individual challenge. The freedom children were seen to have in Forest Kindergarten matches the position of children in Danish society as competent and capable, with rights (Kristjanssen, 2006; Therborn, 1993), whereas the tighter, more structured approach imposed by practitioners is closely related to the health and safety discourse in England that views children as inexperienced (Waite, Huggins and Wickett, 2014), as they not used to being or playing outside, especially unsupervised (Gill, 2007), and can result in them being overprotected. Applying this protectionist approach to Forest School, and to manage risk practitioners scaffolded experiences *for* children, and where possible risk was reduced or removed. Where children's freedom was limited there is a danger that in scaffolding *for* children (Jordan, 2008) the practitioners limit children's choice and freedom in their play and exposure to adventure, which is at odds with Forest School literature where risk is viewed as an integral part (Knight, 2013), and the Forest Learning environment should be 'safe enough' (Knight, 2012, p.2).

6.4.7 Summary

Summarised here there were many similarities between the two cases explored here and these common elements are presented in the middle section of figure 6.1. Each location has distinctive features that afford different experiences of Forest Learning, that make it unique (Knight, 2013; Leather, 2018; Williams-Siegfredson, 2012). The Forest School site was smaller

than the much larger scale Forest Kindergarten. There was agreement in both cases that the best Forest Learning takes place outside, in a wooded area, and preferably with trees, as they provide both places to play and resources for play such as sticks and leaves. The environment is a valuable resource, with many natural attributes and should be recognised and used as such as it provides everything children need (Knight, 2009). Furthermore, the natural environment provides many natural resources that can be included into children's experiences of Forest Learning, alongside fixed equipment such as the playhouse and sand box that can provide a secure base for them to explore from, or a focal point for children's play. Differences in the environment should be naturally occurring rather than manufactured by the adults involved, including open spaces, which can be left for children to experience in their own ways. The environment should be used context for learning, that should motivate and inspire children's play, learning and activities, rather than an outside location as a backdrop for usual activities and ways of working.

The main differences identified between the two cases relates to perception of risk and how this is enacted by adults and subsequently experienced by children. Consideration of the differences, when viewed in relation to the adults interpretations and children's experiences of Forest School and Forest Kindergarten earlier (Section 6.2 and 6.3), through a constructivist lens identified a link between the scaffolding style and co-constructing pedagogy of the adults in each case. Where the adults and children have co-constructed Forest Kindergarten, risk is viewed as a natural part of the experience and is supported by the pedagogues behaviours, whereas in Forest School the adults have scaffolded *for* children so there is less child-initiated play and less exposure to risk.

6.5 Summary: Towards a model of Forest Learning

In forming the research questions the literature in Chapter 2 highlighted three main elements, the adult, the child, and the environment that are central to Forest Learning. Informed by the different emphasis in the body of literature relating to either Forest School or Forest Kindergarten, this thesis hypothesised that pedagogy was different in each case, illustrated in figures 2.1 and 2.2. In previous Forest School literature and research on Forest School pedagogy is scarcely written about, and is represented in figure 2.1 by the dotted circle at the centre, whilst the relationship between the three elements of the adult, child, and environment is shown

by the interactional arrows. Conversely, the literature concerning Forest Kindergarten clearly articulates pedagogical principles that are represented in the centre of figure 2.2, and interactional arrows showing the dynamic relationship between pedagogy and the three elements. Using the same three elements, this thesis identified (and presented in figure 6.1) similarities and differences between Forest School and Forest Kindergarten, finding that although pedagogy is at the centre of both Forest School and Forest Kindergarten, there were differences in how the adult, child and environment interact, each creating a different pedagogical approach. Using a constructivist lens to understand the data, this study presents a new perspective on Forest Learning, with a constructivist pedagogical approach at the centre illustrated in figure 6.2.
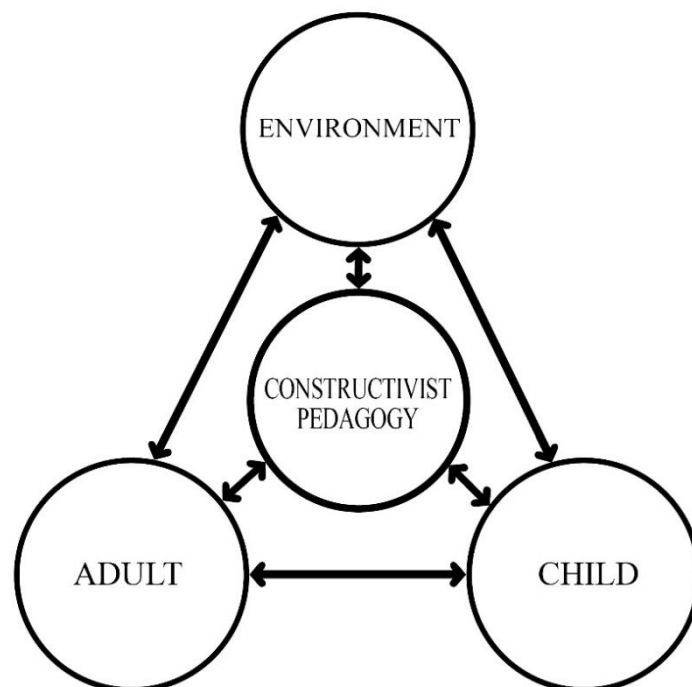

Figure 6.2 Shows the dynamic relationship between a constructivist pedagogy and the child, adult, and environment.

In this study, all the adults involved demonstrated a theoretical knowledge and understanding of how children learn through child-initiated play. However, by applying a constructivist lens it was clear that the pedagogues co-constructed Forest Kindergarten *with* the children *in* the natural environment, whereas the practitioners scaffolded Forest School *for* the children, with the natural environment as a location, indicating that the adult's way of interpreting and enacting their pedagogical approach led to different interactions, and the construction of different environments, resulting in different children's experiences, and are summarised here.

It was found that each case had a similar routine that was adult initiated and provided a different level of structure for the children in each session. The adults in both cases invited children to choose where to play, and who or what to play with, and the children from both cases chose to play in places away from adults. With lunch as the only official interval in Forest Kindergarten the children had more time to develop their own routine and initiate their own play, making choices regarding where they played, what they played, what resources they used, and who they played with, especially as the pedagogues did not plan for activities. Even though the session was shorter in Forest School, and the children took part in focus activities that were planned by adults around specific learning, they also initiated their own play.

The unique place of child-initiated play was identified in both Forest Kindergarten and Forest School, which supports claims made in literature (Eastwood and Mitchell, 2003; Massey, 2002; Williams-Siegfredson, 2012). This study found that child-initiated play is central to both pedagogical approaches, even though how the adults interacted with children is different. For example, pedagogues stand back and observe children, believing that children should work things out for themselves, which fits with a co-constructed pedagogical approach and an equal power balance, that empowers children to make their own decisions and choices in their play. With minimal supervision, pedagogues only intervened for safety reasons, whereas practitioners scaffolded children, supporting them with their play choices through activities and resources, and intervened for educational and safety purposes, creating a one-way in-balance of power. Where the scaffolding approach provides support for children to develop independence, the co-constructing approach treats children as equals, while a shared understanding creates an intersubjectivity between the adult and child, and among children to be autonomous from adults.

Both constructivist pedagogical approaches are valuable and although each place a different emphasis on Forest Learning in both cases children initiated their own play. With the process of child-initiated play foremost, most of the time, children in both cases made choices such as where to play, and what resources to play with. In both examples, children had similar play stories and located the items they needed for their play, adapted resources or used natural resources creatively as props, even though the practitioners in Forest School provided plenty of toys to scaffold the play, and in Forest Kindergarten equipment and toys were left for others to find when needed. This study finds that children in both cases were able to be inventive in their use of resources as they adapted them for their own purpose, even though in Forest School there is a stronger emphasis on curriculum and practitioner's plans emphasise that there is

specific learning with an educational outcome to be achieved, reinforced through a scaffolding pedagogical approach. Initially children's play appeared spontaneous but the adults in each case had identified patterns in children's play, and this study has further identified that children had play preferences, meaning that play could be predicted.

In both cases children preferred to play away from adults, although in Forest School they played on their own, whereas in Forest Kindergarten children played in mixed age groups. Using a constructivist lens this study was able to identify that the co-constructing pedagogical approach in Forest Kindergarten created opportunities for children to be autonomous from adults. Pedagogues encouraged children to support each other, which is preferable to support from adults, which meant there was less need for pedagogues to intervene and so could observe from a distance. In contrast, the scaffolding pedagogical approach favoured in Forest School was focused on specific learning through activities and resources, with the practitioner more directly involved in providing support and interventions. This study recognises that although both approaches are useful, the co-constructing pedagogy encourages children to be autonomous away from adults, rather than in the scaffolded approach where children are allowed to be independent yet at the same time reliant on adults for support. In Forest Kindergarten there were also added benefits from the mixed age groups, as the more able, older children supported the less able younger children, although this would not always be possible given the different context of ECEC in England, where mixed age groups are not widely used in nursery provision.

The environment is identified in this study as a valuable resource, with many natural attributes as it provides everything children need to initiate their own play, including many natural resources that can be included into children's experiences of Forest Learning. Even though the Forest School site was smaller than the much larger scale Forest Kindergarten each location had distinctive features that afford different experiences of Forest Learning, making it unique. There was agreement in both cases that Forest Learning takes place outside, preferably in or near a wood but if that is not possible suitable trees provide an appropriate environment with opportunities for climbing and den building, and resources such as leaves and sticks afford a range of experiences. Differences in the environment should occur naturally, and evolve rather than be manufactured by the adults, including open spaces, which should be left for children to experience in their own ways. Therefore, the natural environment should be used as an integral part of Forest Learning that should motivate and inspire children's own play and activities, as seen in both cases, rather than as a backdrop for adult planned activities.

Fixed equipment such as the playhouse and sand box, and natural features such as trees provide a focal point from which children can play and explore. This study has shown that it is in these familiar places that children take ownership of their play, control the place, make decisions, and develop autonomy and independence, while the flexible nature of these places lend themselves to different kinds of play, encouraging children be creative and spontaneous in their play. From the security of these familiar places, children instinctively challenged themselves, took risks in their learning, and made choices regarding their play, all of which are characteristics of child-initiated play and identified in this study as central to Forest Learning. Physical risk-taking activities such as climbing trees or bushes is made safe in Forest School through adult's scaffolding *for* children, whereas in Forest Kindergarten a co-constructed pedagogical approach results in children operating autonomously, benefitting from the support provided by other children and with adults observing from a distance. Both approaches create a safe place relative to each context and pedagogical approach.

With a constructivist pedagogical approach at the centre of Forest Learning (Figure 6.2), this study shows that all three elements of adult, child, and environment interact dynamically, at different times, in different ways. The adult's interpretation and enactment of different pedagogical approaches were seen to have a powerful effect on both the learning environment and the children's experiences, the places children play in and the kind of play they choose. Identified in this study, adults need to be comfortable with children having ownership and control of their play, whether through a co-construction or scaffolded pedagogical approach, so children can make decisions regarding their play according to their preferences. Similarly, the environment, the natural resources and play spaces it provides, as well as how places are constructed by adults, motivates children in their choices, such as what they play, who they play with and where they play. Therefore, learning that is mediated through a constructivist pedagogy centres on the development of relationships between participants using the outside environment is ideal for Forest Learning. Based on the findings of this study Forest Learning pedagogy includes:

- Environment with natural resources and features that affords play;
- Long-term, regular, and familiar;
- Child-initiated play;

- Away from adults;
- Children support each other;
- Mix of adult scaffolding with minimal supervision (some planned activities) and
- Co-construction between adult and child that creates;
- Intersubjectivity

Chapter 7 - Conclusions

7. 1 Introduction

Originally coming from Denmark, the idea of Forest Kindergarten has influenced the development of Forest School in England. Although, in translation some features may have been adapted, misunderstood, or performed differently. While Forest Kindergarten is an established way of working in Denmark, in England Forest School remains an alternative approach to young children playing outside. The contribution of this study is particularly relevant as there is limited research that has compared the two.

The aim and focus of this study was to find out more about Forest School. Having established the link between Forest School and Forest Kindergarten in Denmark, this study started exploring Forest School in its English context, before looking in more depth at Forest Kindergarten. Although in different contexts, this comparison of the two approaches has attempted to identify similarities and differences, with the intention of adding to the debate surrounding Forest School in England, while offering a new perspective on both pedagogy and practice, that has previously been unavailable. Throughout the study there has been an internal and external struggle between the intention of presenting an honest and authentic representation of each case and the interpretations and experiences of the participants, and the different balance between the participants within each case. The data has shown that the position of the child is different in each case, in relation to the amount and kind of control mechanism exerted by the corresponding adults. To gain a better understanding of the internal dynamics of each case this chapter tries to uncover and explore some of the factors, contextual and case specific. This study has shown that there is a dynamic relationship between the three main elements of the adult, the child and environment. Depending on the unique way that these three elements come together they combine to create an individual Forest Learning experience.

7.2 Major conclusions

Based on the aim and focus of the study, three questions were posed at the start.

RQ1: How do adults interpret and enact pedagogy of Forest School in England and Forest Kindergarten in Denmark?

Using a constructivist lens this study was able to identify that practitioners and pedagogues interpreted and enacted Forest learning differently, how they constructed the learning

environment and consequently how children experienced Forest Learning, which is new knowledge in this area of research.

The practitioner's main approach to Forest School was to scaffold learning *for* children, whereas the central approach of pedagogues in Forest Kindergarten was to co-construct learning *with* children. Characteristic of a scaffolding approach the practitioners employed a one-way or limited two-way power dynamic, whereas the pedagogues preferred to co-construct *with* children using a two-way interplay of power that created a shared understanding or intersubjectivity that was empowering for the children. This was demonstrated by pedagogues who preferred to use a minimal style of supervision that focused on the process of the activity and the children's active engagement in it, while practitioners scaffolding pedagogical approach involved more instruction and supervision. Even though children were active in the activities and initiated their own play in Forest School the adult child interactions focused on educational outcomes. Different interpretations and pedagogical approaches from adults had an impact on how the environment was constructed and children's experiences, in each context.

Although it is not possible to know whether the pedagogical approach influenced different views of the child, or whether different perspectives on the child influenced the pedagogical approach, this study identified a difference between the adult's interpretation and enactment of pedagogy, which is new to this area of study. Practitioners suggest that children are inexperienced at playing outside, which could account for their use of a scaffolded pedagogical approach, whereas pedagogues want children to do things for themselves and make their own decisions which is supported by their co-constructed pedagogical approach. Pedagogues were also concerned with the process of children's play, so they stand back from the children, and use only a minimal amount of supervision with infrequent interventions, whereas practitioners are more interested in the educational or learning outcome, which can be seen in their typical interactions, questioning and instruction style. These different pedagogical approaches, although both based on a constructivist pedagogy created a different learning environment in each context. Although it is difficult to know whether the co-construction created this environment or whether the co-constructed pedagogical approach came out of this context and philosophy, understanding and meanings were shared, children initiated their own play, found the resources they needed for their play, and played in mixed age groups where they supported each other, as pedagogues stand back and observe from a distance. Similarly, it cannot be known whether the scaffolded environment informed the way practitioners behaved in this study or whether the scaffolded pedagogical approach was necessary because of the Forest

School context in England and children's behaviour in it. What is known is that where learning was scaffolded children experienced adult planned activities and resources in addition to initiating their own play, and even though adults frequently intervened, children played on their own, and while this made play less social, they adapted places and resources creatively for their own play.

Even with these differences in pedagogical approach the adults in both cases demonstrated through observation they knew the children's play preferences and had a theoretical understanding of how young children learn, which they applied to their respective constructivist pedagogical approach. Although there are differences in pedagogical approach, in both contexts the children preferred to play away from adults, and whether in their own or in groups they initiated their own play.

RQ2: How do children experience pedagogy in Forest School in England or Forest Kindergarten in Denmark?

As established earlier it is difficult to determine whether the dominant pedagogical approach shaped children's experiences or whether children's use of the space influenced the adult's interpretation of Forest Learning and pedagogical approach. However, it was determined that children's experiences in each case had some similarities and differences, that were influenced by the adult's different interpretation and enactment of Forest Learning and corresponding pedagogical approaches that constructed different learning environments in each context. Using a scaffolding pedagogical approach, practitioners provided focus activities for children to participate in and resources for children to play with. However, children made their own choices over where to play and what to play with from the resources provided, and how they played with the items was not always how the practitioners had intended as they initiated their own play. Using a pedagogical approach that co-constructed a learning environment with children, children had to initiate their own play and to search for resources or tools when they needed them as pedagogues did not plan activities or set out resources. Children were able to spend all day playing in their favourite places engaged in their own play with their friends, and as there was a shared understanding they were unhindered by pedagogues interference, as unless an activity was dangerous pedagogues did not intervene. As pedagogues stood back, children supported themselves by playing in mixed age social groups, where the older or more able helped the younger or less able, operating autonomously from adults.

The significant finding, and unique to this study is that even with different dominant constructivist pedagogies the children in each context initiated their own play. Even though the adults interpreted Forest Learning differently using distinct pedagogical approaches, and whether the experience was co-constructed or scaffolded the children had some common experiences. This study also found that in both cases children initiated play, preferred to play in familiar places away from adults, adapted places to suit their play stories, and their play adapted and evolved as they took on roles and used resources creatively, which demonstrates them taking control of their play. Although different in each context, and whether on their own or in mixed-age groups, the play had common elements such as rules, repetition, and predictability as it happened in familiar, flexible places.

RQ3: What are the similarities and differences between the English and Danish environments and how do these impact on the experiences of their users?

The environment is viewed in two parts the physical and learning environment, although closely related both are constructed by the adult's interpretation of pedagogy and the children's experiences. There was agreement in both cases that Forest Learning takes place outside in a or near a wood or forest area, or at least with some trees, as they provide both places to play and resources for play, such as sticks and leaves. Even though the Forest School site was smaller than the much larger scale Forest Kindergarten, and natural resources were limited because of the scale and size of each location, and the type and number of trees, it still provided familiar places for children to play without adults.

Each unique location has distinctive fixed equipment and natural features, and the kind of play they afforded was an important feature of the children's experience in both cases. For example, the playhouse was a favourite place, and therefore a familiar and secure location from which the children could experiment, explore, and return. Children occupied fixed play spaces physically and also used play props and equipment to demonstrate their occupation and ownership of the place. Children also found and used natural resources and equipment creatively in their play, making them their own, even though in Forest School the adults provided plenty of resources.

Although different amounts of time were spent outdoors in each case, and the frequency of sessions which was different, there was little to suggest that this impacted on the children's

opportunities to play for extended periods of time, repeat preferred play and return to favourite places, as in both cases children preferred to play in familiar and flexible places away from adults, although it is acknowledged that sessions need to be frequent enough so that children can remember them. In Forest School open spaces were filled with resources, activities, and adults, whereas in Forest Kindergarten they were not assigned a specific use or occupied by pedagogues, so the children could experience them in their chosen ways. As experiences are co-constructed rather than activities planned by pedagogues, the natural environment in Forest Kindergarten provides a necessary stimulus and motivation for the children's own activities. Even with the planned activities in Forest School the children still take inspiration from the natural environment.

Using a constructivist lens this study has established that the learning environment is constructed by adults enacting different pedagogical approaches, which effects how the environment is acted *in* and *on* by the children. The pedagogical approach favoured by pedagogues co-constructs a learning environment *with* children and creates an intersubjectivity through shared understanding and meaning where the children experience the environment as equals, with a two-way power balance. Playing in mixed age groups the older more experienced children supported the younger less able children as they encounter problems or engaged in risky play. Alternatively, practitioners interpret Forest School using a pedagogical approach that scaffolds children and provide activities and resources and adults support. Although children play independently away from adults, and initiated their own play, adults are close by to intervene and scaffold children's experiences, resulting in an environment where children experience a one-way or limited two-way power in-balance. Consequently, this study identifies that the different constructivist, pedagogical approaches enacted by adults created different learning environments in each context, which in turn affected children's experiences and reinforces the dynamic relationship between pedagogy and the three elements.

7.3 Contribution and implications of the study

In exploring the three elements of adult, child and environment and by comparing two cases, Forest School and Forest Kindergarten, which has not been achieved before, this study has produced new knowledge that is of particular interest to Forest School practitioners specifically those with young children, and the wider field of Forest School. First, using a constructivist lens this study has revealed that different pedagogical approaches are used in each context. The practitioners used a pedagogical approach that scaffolded Forest School for young children,

whereas pedagogues co-constructed Forest Kindergarten experiences with the children. Also identified in the study, pedagogues created an intersubjectivity through a shared understanding and a symmetrical power balance *with* children, whereas the practitioners scaffolded the experience *for* children through a one-way or limited two-way power in-balance. Even with this difference in pedagogical approach and power dynamics, the children in both cases preferred to play away from adults, in their favourite places and initiate their own play, resulting in this study's finding that child-initiated play is the preferred approach for Forest Learning. Not mentioned in previous research, this study identified that the co-constructed pedagogy of Forest Kindergarten actively encouraged children to play with minimal adult intervention, which was supported by children's play in mixed age social groups, where children could support each other. Although mixed age groups are not the norm in England and so was not a consideration in the Forest School case as children were in same age classes, the implication of mixed age groups is worthy of further consideration.

This study also identified that a familiar environment that is used regularly provides a secure base from where children can challenge themselves and initiate play in their favourite places, either on their own or in mixed age groups. Playing away from adults, children used natural resources creatively and developed their own rules and play stories, which was perpetuated by the natural environment.

The findings outlined in this study adds to the limited research area of Forest School, in the following ways. It uses a constructivist perspective to provide a new insight into the pedagogy and practice of Forest School and Forest Kindergarten which contributes to the ongoing debate identified earlier in the literature. It extends the current research, by providing a comparison of Forest School and Forest Kindergarten and by drawing out the similarities and differences it offers a deeper an understanding of the two practices, than has previously not been achieved. It draws attention to the relationship between the two approaches and makes secure links between each pedagogy which can be built on in future research. In addition, this study provides detailed information on Danish Forest Kindergarten that is now available in English for English readers, extending the literature available and filling a gap in research. Lastly, the findings from this study are combined and presented here as a new model of Forest Learning making empirically based recommendations for pedagogy and practice.

7.3.1 Future research

This was a small-scale study and so claims made beyond the contexts in which this study was conducted are limited at this point in the development of the pedagogical model. There is a high degree of confidence that the model suggested is effective and sustainable specifically within the English context, particularly as the different contextual factors have been taken into account, such as the emphasis on curriculum and assessment in England, compared with less regulation in Denmark. Although the effectiveness and impact of the model are yet to be conclusively assessed, what we can say is that the main characteristics have been securely and empirically based on findings from two examples of practice in early years settings. As a new model, the constructivist pedagogical approach put forward as Forest Learning is yet to be implemented in practice, therefore the next step would be to put the model into use in an early years setting and assess its effectiveness as a basis for a follow-up study.

One issue arising from the study that requires further investigation is the children's use of space. During the study children were found using the space of the playhouse in inventive ways. With limited research into how space is used by children in Forest School, more research is needed to explore how children occupy, control, and repurpose play spaces to build on the findings from this study. In addition, where possible a study in an English nursery of how children's mixed age groups could work to support each other, as identified here in Forest Kindergarten would add further to the field of early years practice. Lastly, more research is needed to address the issue of risk arising from this study. Although not a direct focus of this study, how risk was interpreted differently by the adults in each case as either positive or negative and depending on the pedagogical approach used, there is an implication for the children's experience of Forest Learning. Therefore, a more detailed study into how risk is constructed from a constructivist perspective that explores how adult's co-construction *with* children impacts on children's experiences of risk and challenge would be useful.

7.3.2 Developing Practice

The Model of Forest Learning (Section 6.5), based on the characteristics that have emerged from the study, from a constructivist perspective presents a different view of Forest School as a pedagogical approach. The model has potential for an alternative approach particularly considering the interaction between child-initiated-play, the importance of the environment and how adults facilitate and construct learning either as a co-construction or scaffolded pedagogical approach. As a new model the characteristics of Forest Learning have not been

subject to public exposure and how the characteristics proposed will be received by the Forest School community is yet to be determined. Further, the constructivist pedagogical principles that use child-initiated play, in a familiar outside environment set out in the model are yet to be tested in practice and any criticisms or developments regarding the sustainability of the model are as yet unknown.

7.4 Evaluation of research

This study is small scale and restricted by time, so claims made beyond the context in which it was conducted are limited. During the study I was positioned as a supporter of outside education and an early years educator. Although I am an insider within the English education system, I only have knowledge of the Danish early years education system from the literature available, and as an advocate of outside learning I may be more favourable towards its benefits, that may have led to researcher bias. Throughout I have tried to present a balanced perspective of each case, even when comparing the two approaches I have tried not to present either as a deficit model or favour one over the other but present the data as representative of each context. It is also important to recognise the positive impact my previous knowledge and experience may have on the research process for example, my experience of working with young children allowed me to deal sensitively with the interviews, photo tours and observations that involved them, to gain their perspective and experiences of Forest School in both countries that is worthy of study.

During the literature search it became apparent that it would not be straightforward to compare two similar yet different approaches to outside learning. Forest School has its own body of literature, that also fits alongside literature relating to early years pedagogy, as well as being positioned within an educational context in England, whereas in Denmark, as Forest Kindergarten is not considered a separate approach to ECEC, it was difficult to separate it from more literature relating to more general kindergarten practice. Consequently, the literature review reflects this difference. In addition, the study was limited by literature regarding Danish kindergarten and Forest Kindergarten that had been published in English.

As this study adopted a comparative approach it was necessary to ensure that as far as possible data was collected in the same way in each case. This was complicated by Forest School happening weekly and Forest Kindergarten happening every day. Data was collected from one Forest School session each week, over five weeks in total. Data from the Forest Kindergarten was collected on five consecutive days over one week. Travel to each site meant I spent a full

week in Denmark collecting data and travelled one day a week to the Forest School site in England. A data collection schedule was used to maintain consistency and parity of data collection across the two cases. However, on reflection it is possible that I was more immersed in the Danish Kindergarten having spent all week there, whereas the weekly visit to Forest School were more separate, which may have created a bias in the research data and in particular the interpretations made based on the data, although by presenting each case separately before comparing the two, I have tried to present a fair representation of the data collected in each case.

In addition, an issue arose during the data collection phase over translation and transcription of the Danish data. Firstly, using the Danish pedagogue as translator could have allowed a bias into the data as she worked in the kindergarten and could have presented information more favourably. However, as she knew the children and they were comfortable with her she was best placed to translate, which helped to achieve genuine responses. In addition, I had the intention of transcribing the audio data after each visit as I had done in Forest School in England. However, I had not fully anticipated the amount of time required to do this, so instead I played back the audio and made notes. Transcription then took place back in England. Notes made from the transcripts, as well as from the observations and photo-tours became questions in the semi-structured interviews and gain a unique insight into each individual case. However, this meant that the questions were not asked in the same order, so the two semi-structured interviews were different. However, to make sure the same key questions had been asked and answered, where possible I referred to a list of main themes and questions to be asked.

7.5 Concluding remarks

To date much of the drive in Forest School research has been focused on trying to understand and define it, without considering the origins of Forest School in Denmark, the practice taking place there, and any relationship between the two approaches. By comparing the two practices, this study has achieved something that has not been done previously. In addition, identifying the similarities and differences of the two approaches, has provided an informed view of both Forest School and Forest Kindergarten. Lastly, by establishing a model of Forest Learning based on the main characteristics identified from the comparison, this study has opened-up the discourse around practice and pedagogy. At the very least this study suggests an alternative definition of Forest School, and as such adds to the body of research and evidence-based

practice which serves to counter the assumptions and practices suggested in older research. Proposing a constructivist pedagogy that can be applied to different locations of Forest School, and that also demonstrates a powerful relationship between the three elements (adult, child, and environment). It therefore represents a contribution to a continuing debate about what is the best way to deliver Forest School as a pedagogical approach to that is responsive to the needs of children and the environment in which it takes place.
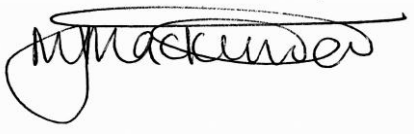
Appendices

Appendix 1: Research Ethics Clearance Form

(For: Masters student dissertations, doctoral research projects and <u>all staff research)</u>

Section 1. Your details.

Name:	Melanie Mackinder
School:	N/A
Student ID Number:	B1400014
Degree for which this research is being conducted **and/or** staff position at Bishop Grosseteste University.	Doctorate in Education
Supervisor allocated	Yes
Supervisor	Professor Chris Atkin and Dr Emma Pearson
Period during which research will be conducted (start* and end date). *start date must be later than the date of the Research Ethic Standing Group meeting	Phase 1 England -Data collection November 2015- May 2016 Phase 2 Denmark- Data collection April 2016-July 2016
Any specific external professional codes of practice that pertain to the kind of research proposed.	British Educational Research Association (BERA 2011)

	The Danish Code of Conduct for Research Integrity (2014)
Your Signature	

Section 2. Details of proposed research study.

a. Full title:	Lost in Translation? A comparative case study of an early years' Forest School in England and a Danish Forest Kindergarten
b. Aims and objectives:	R1. How do children (age 3-4 years) interpret their experiences of UK Forest School and Danish Forest Kindergarten?
	R2. What are the teachers (UK) and pedagogues' (Denmark) interpretations and experiences of Forest School and Forest Kindergarten respectively?
	R3. What are the similarities and difference between Forest School and Forest Kindergarten environments and how do these impact on the experiences of their users?
c. Brief outline of the research study. Please ensure that you include details of the following: **Design** (qualitative/quantitative etc).	This study sets out to use a comparative, exploratory case study approach (Stake, 1995; Yin, 1994) to compare and contrast two early years' settings. Phase 1 of data

Measures (questionnaire; interview schedule; experimental trial etc.)	collection will be carried out in a UK Forest School.
	The second phase will take place in a Danish Forest Kindergarten (each as a separate case), to be compared. Both will focus on children and adults as individual cases within the case (Stake, 1995; Yin, 1994). Having identified a gap in current research into the definition of Forest School (Williams-Siegfredson, 2005), and specifically into children's perspectives (Andkjaer, 2010; Clark, McQuail and Moss, 2003; Dencik, 1998), the intention of the research is to gain a greater understanding of each case, in order to answer the research questions shown earlier in 2b.
	Interview of main adult participant.
	Observation of the setting and forest will be used initially, then followed up with photographic walks (Mosaic Approach, Clark and Moss 20021), using digital tablets (I-pads), with all adult and children participants individually.
	This will be followed up with semi-structured interviews also using photo elicitation (Einarsdottir, 2007) with adults, repeated with children after photo tour.
	Each of the 3 children will be observed.
	Observation of 1 adult involved in an activity.

d. Where will the study take place and in what setting?	Phase 1 will take place in an early years Forest School setting. Phase 2 will take place in a Danish Forest Kindergarten. Both settings still to be selected and participation agreed.
e. Give a brief description of your target sample (e.g. age, occupation, gender). Is the participation individual or part of a group?	Three children aged 3 or 4 Two adult practitioners (Forest School leader trained preferable and pedagogue), gender and age non- specific. All participants will be from the same early years setting.
f. Are any of your participants in vulnerable groups (e.g. children under 16, individuals with learning difficulties or mental illness? Please specify the nature of the vulnerability and complete section (g).	Three children aged 3 or 4 from each setting, 6 combined total.
g. **Vulnerable groups**. Have any special arrangements been made to deal with issues of consent (e.g. is parental or guardian agreement to be obtained, and if so in what form)?	The researcher will explain in straightforward yet detailed terms what is involved in the research process so that the parents/carers and adult participants can give informed consent. Informed consent will be obtained from the adult participant. Informed consent will be obtained from one parent or carer from each child. The researcher will also explain the research to the children in simplistic yet honest terms. To ensure the children also have an understanding of what is involved in the research process, photographs will be used to

	illustrate with a visual image what is involved, this will facilitate young children in order that they have a realistic picture (as far as is possible with children so young) of what is involved (Dockett, Perry and Kerney, 2013). The children can then give assent each time they agree to participate using a smiley face chart (Einarsdottir, 2007).
	Written Danish translations will be used for all consent paperwork and oral translations used to communicate with children in setting.
h. How will participants be selected, approached and recruited?	Both the early years Forest School setting in England and the Danish Forest Kindergarten will be contacted initially via email, inquiring if they would be interested in participating in research. Further details containing an overview of the research outlining the level of participation required of the Providing details of the research.
	Once the setting indicate an interest and give provisional permission to proceed the researcher will arrange to visit the setting to review the suitability of the setting and to discuss the research in more detail with the practitioners, more detail into the research and level of involvement will be given.
	If the practitioners are still interested research information sheets and consent forms will then be given and explained to the setting, in order for them to give informed consent.

	A provisional visit to the Danish Forest Kindergarten may not be possible due to geographic and time limitations.
	Information letters for parents will also be sent home with the children explaining the research process and what is involved. Parents of the children involved will have the research explained to them by the researcher and informed consent sought. (BGU, 2013)
	The children interested in being involved in 'playing detective' (Roberts-Holmes 2014) with the researcher, with their parent, will have the research tasks explained to them. Detailed information regarding the level of involvement will be provided for the parents.
	If the children agree to participate and the parents also agree the children during the research process, they will be reminded of the tasks involved each time the researcher carries out any research. Each child will then be asked to tick the smiley face chart for assent.
i. Is written consent to be obtained? If **no**, please state why. If **yes**, please complete the standard Consent Form (see p 6) and attach to this documentation.	Yes

Section 3. Risk & Ethical Procedures.

a. Are there any potential risks to participants? These could be physical and/or psychological. Please specify, and explain any steps you have taken to address them.	The research will take place in the participants usual outdoor setting which will have the settings usual health and safety regulations applied. The researcher will be familiar with any specific areas that require extra safety precautions such as a pond and will adhere to the regulations of the setting.
	The children will only be in places considered safe by the setting.
	The child participants will be with the researcher at all times and the researcher would intervene if the child was in any danger.
	The researcher will not be alone with the participants in any private and personal places.
	The researcher has DBS clearance.
	There will be no psychological harm as the research process will not require the participants to divulge personal information beyond their views about their time in Forest School settings. The researcher will respect and value the individual child's responses and maintain a professional yet friendly

	relationship with the children to maintain ethical integrity.
	Participants will be able to refuse to answer any question they feel uncomfortable with and also withdraw from participating at any time if they wish without consequence.
b. How might participation in this research cause discomfort or distress to participants? Please specify and explain any steps you have taken to address these.	Respect for all participants will be paramount at all times.
	There are no specific areas that may cause distress or discomfort. If there is any evidence of distress from any participants as the research takes place the setting practitioners will be informed and the participant facilitated to withdraw from the process.
	The settings Safeguarding Policy will be sought before research takes places and any disclosure will be reported immediately to the named person and details recorded as the policy and setting require. Equally should any inappropriate behaviour be observed further action will also be taken by the researcher.
	Private conversations will not be recorded or used as part of the research data.
c. How might participants benefit from taking part in this research?	Adults may feel able to reflect on their setting in a way they haven't done before. This may involve them in reflecting on personal practice and possibly changing aspects of their setting or practice as a result. The adults may also gain an insight offered by the

	children's images that may cause them to reflect on approaches to practice.
	Children, by showing an adult where they play, the games they play and then talking about and explaining the activities and places can allow the children to be experts in their own lives, telling their own story or narrative (Langsted, 1994).
	This should give the researcher and practitioners more information into how children and adults view forest school, how learning takes place in the setting and how adults and children's views compare. Developing a co-construction of knowledge (Dahlberg, Moss and Pence, 1999 and Greenfield, 2011). This will offer a unique approach and develop knowledge in the field.
d. Does any aspect of your research require that participants are naïve? (i.e. They are not given the exact aims of the research) Please explain why and give details of debriefing procedures.	No

e. Every participant must be given a written INFORMATION SHEET giving details about the research. This is in addition to the consent form. Please add a copy of both to this form before submitting your documentation to the Research Ethics Standing Group.

Section 4. Data - Confidentiality & Anonymity.

a. Where and how do you intend to store any data collected from this research?	All audio recording and photographic images will be stored securely in personal computer files that are password protected. Transcripts of audio recordings will be stored safely and files will be encrypted and password protected. Any stored data will be destroyed after the research is written up.
b. Under Data Protection regulations (e.g. *data is stored securely and is not accessible or interpretable by individuals outside of the project*), give details of steps you will take to ensure the **security** of any data you collect.	Photographic images and audio recordings will be stored securely in personal computer files that are password protected. Transcripts of audio recording will be stored safely and files will be encrypted and password protected.
c. What steps have been taken to safeguard the **confidentiality** of personal records?	Identity of participants will be changed and original names will not be used or recorded. The name of the setting will not be used and its description will be general and not setting specific. If non-participants are inadvertently included in photos consent will be sought from the appropriate adult or parent and the child concerned. If necessary photographic images will be destroyed if non-participants do not give consent or faces will be blurred if necessary to protect the identity of

	participants and non-participants (Einarsdottir 2007).
d. Will this research require the use of any of the following:- - video recordings Yes/No - audio recording Yes/No - observation of participants? Yes/No	Yes photographic images Yes audio of photographic tours and interviews Yes observation
e. If you answered YES to any of the above, please state how you will ensure confidentiality and anonymity, and what you intend to do with these records on completion of the research.	All personal details such as names will be changed to protect the identity of the participants and the setting. On completion all files will be permanently deleted from the hard drive of the computer and i-pad.

Section 5. Comments of Supervisor (where appropriate)

All students MUST have this section completed by their supervisor (where allocated) before submitting to the Research Ethics Standing Group. Incomplete forms will not be considered.

Melanie and I have discussed the ethics issues raised in this research particularly in terms of the early years pupils and the two settings (one where Melanie will be relying on interpreters). I'm assured Melanie will deal sensitively with the young pupils and as an experienced practitioner in this field ensure the children's voice/wishes are paramount in the research. There are fewer ethical issues associated with the interviews of the two adult owners/leaders but the same sensitively will be observed.

Professor Chris Atkin

Supervisors: Please enter any comments in this box and return this form to the CEDaR

Administrator

Section 7. Comments of Project Leader/Principal Investigator (where appropriate)

If this research forms a discrete part of a larger project that has a project leader, now pass this form to the person who is leading the project and ask him/her to comment on any ethical considerations that this research may raise.

Project Leaders: Please enter any comments in this box and return the form to the CEDaR Administrato

---

Please indicate which of these options is to be followed by placing a tick in the appropriate box.

Inform the applicant that ethical clearance is not required.	
Grant ethical clearance.	✓
Return the form to the applicant with notes on what further information is required before a decision is made	
Refuse ethical clearance	

Research Ethics Standing Group Coordinator's Signature:

Date: 14.12

Appendix 2 Research protocol letter

Melanie Mackinder

Bishop Grosseteste University

Lincoln UK LN1 3DY

melanie.mackinder@bishopg.ac.uk
07837250905

Thank you for agreeing to participate in my research. Below is an overview of the research, detailing your level of involvement and how much time it should take. After reading and understanding the research to their personal satisfaction each participant will be required to sign a consent form. Parents will be asked to consent on behalf of their children and children will be asked to agree to participant each session as assent. Informed consent is also sought to use the images as a talking point in the English setting.

The study has been designed to explore children's perceptions of forest school. It sets out to compare children's forest school experiences in England and Denmark, using photographs to mediate children's voice.

The study will involve:

A guided tour of the setting by a practitioner.

An initial observation of the setting where field notes will be used as a record. Then individual observations of each child and the adult participant, using field notes to record observations and photographs.

1 adult who is forest school trained /pedagogue.

3 children, aged 4years approximately, who have participated in forest school sessions for approximately a year.

Each of the participants (adult and child) will take the researcher on a **tour** of forest school. This tour will be audio recorded. The participant will use an I-pad to take photographs of places they think are important and interesting. These images will then be used as a focus for a discussion / interview.

The children will be interviewed as a group while the adult will be interviewed separately.

The children group interview:

Questions will be asked about the images, why they were chosen, their importance, what happens there etc. Ages and gender of each child will be recorded.

The adult interview will consist of 4 parts:

Part A: will include questions about training and qualifications, background, educational values and beliefs that impact on forest school experiences, your thoughts on forest school etc.

Part B: will be able to talk through their images explaining why they selected them.

Part C: will also be able to look at the children's images, discuss them and their choices, adding some extra detail background detail why they think chose them.

Part D: The English case has agreed that we can discuss the photos of their setting to obtain your views.

It is estimated that this research will take between 5 and 8 sessions over 4 days:

1 initial informal tour of the setting (pedagogue and researcher)

1 initial session observation of pedagogue (forest school session)

Observation of each of the children's activities and 1 observation of adult activities

4 photo tours 1 each participant (adult and child))

3 follow up interviews with children after the photo tour (15 mins max)

1 follow up interview with adult (1 hour max.)

I would appreciate it if you could select 5 possible child participants before my arrival on Monday 16th May and seek ethical consent from parents if required. I only need to work with 3 but just in case one is ill or chooses not to participate. I will be happy to talk with parents and explain the research in more detail if required. Usually the children have not taken photographs featuring other children they appear to take the images of 'things' or places, as I ask them the question 'Show me your *school*'

Thank you for your interest. If you have any questions I will be happy to answer them. I hope you agree to participate and found the experience interesting and enjoyable.

Mel Mackinder

Appendix 3 Research information sheet

RESEARCH INFORMATION SHEET

Outline of the research (in a couple of sentences in non-specialist language)

Observe a Forest School session.

Individually, 3 children will show researcher the forest during a 'photographic tour', during which they will take photos of the Forest. The photos will then be used as a discussion or informal interview between the children/ adult and researcher

This will be repeated with the Forest School leader.

Who is the researcher?

Name: Melanie Mackinder

Institution: Bishop Grosseteste University

Contact details (please use your BGU e-mail): melanie.mackinder@bishopg.ac.uk

What will my participation in the research involve?

Being observed and interviewed by the researcher and access to planning for those sessions. Take researcher on a tour of the forest and take photos and discuss the photos in semi structured interview.

Children take the researcher on a tour of the forest, taking photos and discussion of photos. Three children in total, one per session. Observation of children and adult activities. Follow up discussion about the photos.

Will there be any benefits in taking part?

You might be interested on the findings particularly using the photographs that the children take this might give an interesting insight into how children perceive the activities and locations. Setting might be able to use this as CPD.

Will there be any risks in taking part? No additional risks involved as the activities will take place in the normal forest school session.

What happens if I decide I don't want to take part during the actual research study, or decide I don't want the information I've given to be used?

If you are not happy at any time then you are able to withdraw from the research.

How will you ensure that my contribution is anonymous?

Confidentiality is assured as names of setting and individuals will be changed. Photographs will be used for research (analysis) purposes and may be published.

Please note that your confidentiality and anonymity cannot be assured if, during the research, it comes to

light you are involved in illegal or harmful behaviours which I may disclose to the appropriate authorities.

Appendix 4 Consent Form Practitioner/Pedagogue (translated into Danish)

BISHOP GROSSETESTE UNIVERSITY **Forskning samtykkeerklaering (CONSENT DANISH pedagogue)**

Titlen pa forskiningsprojekt: tabt I oversaettelsen? En sammenlignende casestudie a fen Engelsk tidlige ar skov skole o gen Dansk bornehaven.

Navn pa forsker: Melanie Mackinder **Institution: Bishop Grosseteste University Lincoln, UK**

Contacy detaljer: melanie.mackinder@bishopg.ac.uk
07837250905

	Ja	Ingen
1. Jeg bekraefter, at jeg har laest og forstaet oplysningerne og gav haft mulighed for at stille sporgsmal. I confirm that I have read and understand the information sheet for the above research project and have had the opportunity to ask questions		
2.Jeg forstar, at min deltagelse er frivillig, og jeg er fri til at traekke sig tilbage til enhver tid uden at give grund. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.		
3. Jeg er enig at tage oArt I dette forskningsprojekt, og for de data, herunder fotografier, der skal bruges som forskeren finder det hensigtsmaessigt, herunder offentliggorelse. I agree to take part in this research project and for the data including photographs to be used as the researcher sees fit, including publication. Navn pa deltager /foraelder Name of participant		

Signatur Signature   Date

Appendix 5 Parent consent form

 Forskning samtykke (CONSENT DANISH parent/ foraeldre)

Titlen pa forskiningsprojekt: tabt I oversaettelsen? En sammenlignende casestudie a fen Engelsk tidlige ar skov skole o gen Dansk bornehaven.

Navn pa forsker: Melanie Mackinder **Institution: Bishop Grosseteste University Lincoln, UK**

Contacy detaljer: melanie.mackinder@bishopg.ac.uk   07837250905

	Ja	Ingen
1. Jeg bekraefter, at jeg har laest og forstaet oplysningerne og gav haft mulighed for at stille sporgsmal. I confirm that I have read and understand the information sheet for the above research project and have had the opportunity to ask questions		

	Ja	Ingen
2. Jeg forstar, at min deltagelse er frivillig, og jeg er fri til at traekke sig tilbage til enhver tid uden at give grund. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.		

	Ja	Ingen
3. Jeg er enig at tage og Art I dette forskningsprojekt, og for de data, herunder fotografier, der skal bruges som forskeren finder det hensigtsmaessigt, herunder offentliggorelse. I agree to take part in this research project and for the data including photographs to be used as the researcher sees fit, including publication.		

For foraeldre. parents only

	Ja	Ingen
4. Jeg forstar, at mit barn vil blive bedt om at deltage I denne forskning. I understand that my child will be asked to take part in this research.		

Navn pa deltager foraelder Name of participant/parent

Signatur Signature   Date Dato

Appendix 6 Children's consent form (Smiley face).

BISHOP GROSSETESTE UNIVERSITY **<u>Research Consent Form (Child)</u>**

Title of research project: **Lost in Translation? A comparative case study of an early years England Forest School and a Danish Forest Kindergarten.** Name of researcher: **Mel Mackinder**

Are you [☺] [☹] to go in the forest with Mel today?

Are you [☺] [☹] to use the i-pad today, with Mel?

Are you [☺] [☹] to have your photograph taken today?

Are you [☺] [☹] to talk to Mel today?

Are you [☺] [☹] to talk to Mel about the photographs today?

Name Signed: Date

I was surprised at the size and scale of the EKG site - it feels so different to anything I've seen and experienced before. The space is very open and there was very little equipment - a lack of resources?
It looks and feels empty (compared with E) the equipment is missing.
I wonder if the Ped's 'set it up'? Must look and ASK. ✻
Once the children were outside the space came to life - with activity I didn't realise that there were over 150 children using the garden - 65 from this FKG! But the space is huge - easily big enough to accommodate more than 100 ch.
The children seemed to become absorbed into the fabric of the space - the nat environment didn't seem full or busy - or noisy

The children all seemed to play in the 'hidden' areas so I couldn't always see them! I found the backs', in the bushes, up in the trees + in the house + dens - spread around the site. I expected to hear lots of noise - but it's quieter than I expected - with so many ch.
Maybe the trees buffer the sound? Maybe the ch. are engaged in their play (+ noise comes from excitement) but because it's normal?, less noise? Even though ch. are running around they are not screaming - just a lot? of noise
— Must ask* about 'daynaptime' or there wasn't one? Not at lunch or at the end of the day? Not dry up time at lunchtime or the end of the day.
Children just leave their things where they are playing with them - but then not a lot of resources. TAKE PHOTOS. ASK Pedagogue ✻

Appendix 8 Interview Questions and main themes

Interview Questions.

> **Protocol**: Confirm that participant is happy to be interviewed. Explain that interview is informal conversation, and if you don't want to answer a particular question you just have to say so and that's absolutely fine.

Key points to explore:

1. Background (education (years), training, experience)

2. Values Beliefs, attitudes, philosophy child as a learner, View of how learning happens (parent attitudes- lifestyle) Strengths / weaknesses of approach

3. Curriculum

4. Activity / play how planned organised

5. Resources - use of inside /outside resources, fixed equipment, favourite equipment use of equipment

6. Environment (inside /outside) physical space – use of space, link to equipment-fixed fluid, dynamic natural environment, spaces, static spaces, size scale, weather (clothing), safety, risk danger (adult child ratios)

7. Rules, Ritual, Routine

Opening Questions

Could you start by telling me a bit about yourself…How long you have been teaching? Experience, training, qualifications.

Tell me about your role here

How would you describe explain Forest School / Kindergarten? What is important about it? (philosophy, Values ethos)

What is it about FS that drew you to it? personally as an early years centre / other staff?

Overview of your background, personal philosophy Forest school philosophy.

Do you have any special training Whole school training? Individually trained? What did training consist of?

How do you see FS continuing or developing, evolving in your setting? How?

What do you think are the **benefits** of FS for children? Particularly young children?

Here in your setting children have forest school in the woodland garden for 1 session a week (which is about 3 hours). Do you think being outside all the time is a good idea? Why? General background Benefits parents attitudes, children? (return to some of these).

How are sessions **organised structured (routine, rules)**?

How does FS work, in practice? In your setting with your children?

Do you **plan** for the sessions? How are sessions **organised**? (Copy of plans if available)

How does the session run alongside the plans? Or just a guideline? Do you plan activities? Adults? How does FS **fit with EYFS**? How does FS fit with broader early years **theoretical ideas? Principles**? How if do you ensure learning takes place, Planning (process, do children plan for themselves or is it organic and process dependent on situation and cannot be planned?) How far are **children responsible** for their own learning? [activity curriculum

Could you sum up a typical session /day Particular tasks. [activity planning resources]

What kind of resources do you or the children use? Fixed equipment, favourite places, favourite toys Are there toys that are specific to FS?

Features of the natural environment

How do you feel about children being outside all the time? How do you think children learn when they are outside? What are the benefits?

Learning points safety ?

What are your views on view on Forest School? What do you think the Forest School **philosophy** is? How do you think your philosophy fits with that of **Forest School**? Where might it differ and in what ways? **[VBA]**

How do you think the **children learn** during the session? In what **ways** do you think the **children learn**? Can you give an example? Is this different to being inside? How? [activity **[VBA] interactions]**

Are there any particular 'things' you think they learn? How do you think this is different from classroom learning? And outdoor learning in the 'traditional sense'?

How do you view the child as a learner? How do you think this fits with traditional early years learning 'theory' pedagogy, EYFS and compared with outside learning / FS?

How 'involved' or absorbed do you think the children are? (concentration) **Can you give examples.**

How **independent** do you think children are in session? Can you give examples? [activity personal skills learning]

Do you think the high adult child **ratios i**mpact on this? In what ways? [activity]

Any issues with Health and safety? [risk] Parents attitudes?

How would you describe **the adults role**? What are the most important things for an adult to do? Be aware of? How high is safety? Individuals interpretation? How is this planned for? [activity interactions]

Is there a balance between **child initiated, adult initiated** learning? How is this planned for? [activity]

How much emphasis do you place on independent learning? Age related? Experience? Confidence? [activity]

You use '**free flow play**' and **continuous provision** how does this fit with your view of FS? [activity curriculum]

Are there children who don't like it? How do you they overcome this? **[VBA]**

Benefits - positives/ drawbacks, weaknesses negatives? **[VBA]**

Do you do any assessments during FS? If yes what in particular? If no why not? Expand.

Do you think FS is different to classroom learning (inside)? In what ways?

Do you think FS is different to **traditional** outdoor learning? In what ways?

Do children cope manage these differences? In what ways?

As you know there are similar practices to FS elsewhere how do you think they may compare with what you do here? (**differences/ similarities**.

The coach arrived and the children
get off it and go into the EG building
They hang up their coats haghrem [?]
up + go to the toilet or sit in a
carpeted area and look at books [?]
some chat. Adult* comes in then
Sits down – children join her + they
chat. One child is fidgeting + she
puts her hand on his shoulder.
Another adult B comes in and joins
the circle – opposite side. Play a
follow the leader type game – like
Simon Says? Stand up, sit down, jump
Spin the Bottle – Adult B says child's
name, bottle stops again, another
child – they are chosen to do 'jobs'
– Set lunch table & tidy up/snack
They collect 'breakfast' (basket of fruit
and bread) take it round the circle
children are chatting. (10 mins?)+

[red margin: Routine? Is it the same?]
[red: all girls climbing?]
[red: Are adults around?]

When finished chatter. Adult A asks
children where they are going to play
(everyone round the 'circle') One boy says
'I finished' – answer as a bloke [?]
The children collect coats (shoes? some
seem to have outside/inside shoes? +
go outside (same adults (B)+others
already outside). *[red: diff clothing/diff weather?]*
There was 1 girl who had started KG
today – and sat with her older sister
in hut circletime they are having
hands – they go outside together.
Older girl puts her arm protectively
around her sister and they head
towards the big climbing frame +
a group of trees? They go + join a
group of girls – The girls start climbing
the trees but new girl is reluctant?
shy? watches older girls + hesitates
Sister comes over to her and sits with
her – they chat + then slowly start
to walk around trees – old sister
shows her some places to play and they

[red margin: Similar to FS/E]
[red: How long been coming?]
[red: How old are they?]
[red: social/family!]
[red: Anneka]*
[red: FAIRY GIRLS?]
[red: difficult to ??]

Appendix 10 Interview transcript (annotated)

Treated the same or different to inside/usual provision & practice

Extract from the Semi Structured Interview with Practitioner (England)

Q: so how do you go about organising the session?

planned in meeting 'formal'

[1:11:49] I.. emr... well we plan like normal just like we would usual activities so I think it fits with EYFS)...I think ...we look at EYFS)...yeah it fits with EYFS we can when we're planning in our planning meeting there is no mis... anywhere.. EYFS fits alongside Forest School ideas

curriculum ...it's something we work with play there is always something we can link it with planning, with our weekly planning there is always something we can link it with...and back to EYFS ...as

use

much as possible we link our planning... our activities to the children's development... their needs... inside and out and then we have free-flow play and other child-initiated activities it's a natural way of exploring different things some of it might be around self-esteem or something

EYFS 6 Areas

like that or it could be something more physical skills it could be language sometimes around for us about what they're getting out of it or it could be exploring the world looking at the

a lot about nature
Is this reflected in activities & play?

natural objects out there so its not just all exploring the natural world and it's purely the um.. understanding of the world and its all about nature ... and you know its all about decay and growing .. its actually about things like that.. but that there is so much more is what I feel we can get out of it and with adult focus activities and without the practitioner activity offers a different opportunity rather than an adult led experience

Is play child-initiated or structured / organised ? HOW.

play activities

'different' in what ways ?

How much is discovery learning ?

Q: So, when you're doing a session do you have a routine or a format

The getting them ready getting them dressed depending on the weather depends on what they wear..washing their hands and in the summer its obviously its a lot quicker cos they don't have to suit up and boot up and we can just get out there and so we get a longer time out there and it's the same coming back you don't all have to take your wellies off and that that's probably the biggest routine and my particular class room is the furthest away so they walk all the way round and sit down before get the adults prepared and the children prepared for the things that might be happening we talk through it

Adult 'control' structure
How much is (free) play ?
Is it child-initiated or adult directed ?
freedom - control - autonomy ?

Words used play / activity / continuous provision
- unpack meaning, differences bet. actual 'practice' reality behind words used.

Q: 1:12:44) so do you feel that you have to justify it or do you feel that it just flows and fits with what your already doing with regards to forest school?

For me it feels natural um… and it feels we can and it fits with everything else that we do I think there's other practitioners perhaps that because being outside is not necessarily not their preferred thing that perhaps I do have to feel that I feel perhaps have to …we have to justify it to them

[1:22:27] Q: So do you think as one of the ideas of forest school is the idea of doing it regularly every week so rather than it being a visit

There is something about doing it every week because they've we've built upon things each week like with the bugs she might never and her friend done it and never got the worm on her hand

(Caitlin)

[1:23:05] it might have just been an activity of a bug hunt led by an adult we'll go/do this activity got to having the worm on her hand it might only ever have been seeing someone else doing it and never really revisited it again whereas things have moved on in different ways whereas actually like continuous provision you almost give them the skill to do it and then they refine it and explore it in different ways by returning to it themselves. Then it's the familiarity of the certain things that are the same the trees are rooted so they are I the same position although they might look different at different times of the years there are other things that are the same and yet today would be different to last week and it would be different to next week (but also a different person could would may add a different dimension to activities expectations depending on their confidence and experiences)

Q: so it is familiar enough but then there are some differences is that it?

Yeah that's it yeah so you might revisit some things in the planning, so it is the same but not always every week…so I could predict what kind of activities some children would always choose their favourite things to play.. she (name) knew that there were certain places outside

Caitlin

here where she would be able to predict because she's done it before where she would find worms so although say you then took them to Belton House she would know that by turning over a log because she's done that before she might find worms or wood lice so that's showing

257

Does 'repetition' seen here link to
Forest Kindergarten 'set-plays'? Explore
if same or different in what ways?

[TIME]

applying knowledge
and skill

that she has learnt that idea that knowing Of the place And she's transferring it to a different

place by doing it there I mean its similar enough with subtle differences because they are

learning through repetition and experience because that's how children learn and she is can

apply that to a different situation So Yes I think they do benefit for it being regular they get the

repetition they get to know when they are going outside to do Forest School and they can

explore and perhaps and slowly change things themselves.. as well as us.. they get that

regularity with different activities each week within familiar surroundings to it that they can feel

familiar and confident in their surroundings and which then links into self- esteem so its familiar

builds the confidence because they're comfortable because they know it so then if they're then

the while setting is the learning should be the same because well only learn if were comfortable

and secure

(?)

yes yes   'play' - structured - continuous provision planned

continuous provision allows us to give them the skills to do it, with adult activities such as bug

hunting, then they will refine it with their friends or independently it's the routine and familiarity

and they're learning through repetition and experience because that's how we children learn

and then they're applying it to different situations they benefit from it being regular they get the

repetition they get to know what they are doing they can explore and perhaps slowly change

things themselves as they become familiar and confident with their surroundings which then

links to their self-esteem and that builds on their confidence because they are comfortable

because they know it so well so then the learning activities should sometimes be the same

because they will only learn if they are comfortable and secure our role sometimes it might be

boosting self-esteem is to help them to engage and learn and explore for themselves

social
& on
own

repetition
regular
familiar

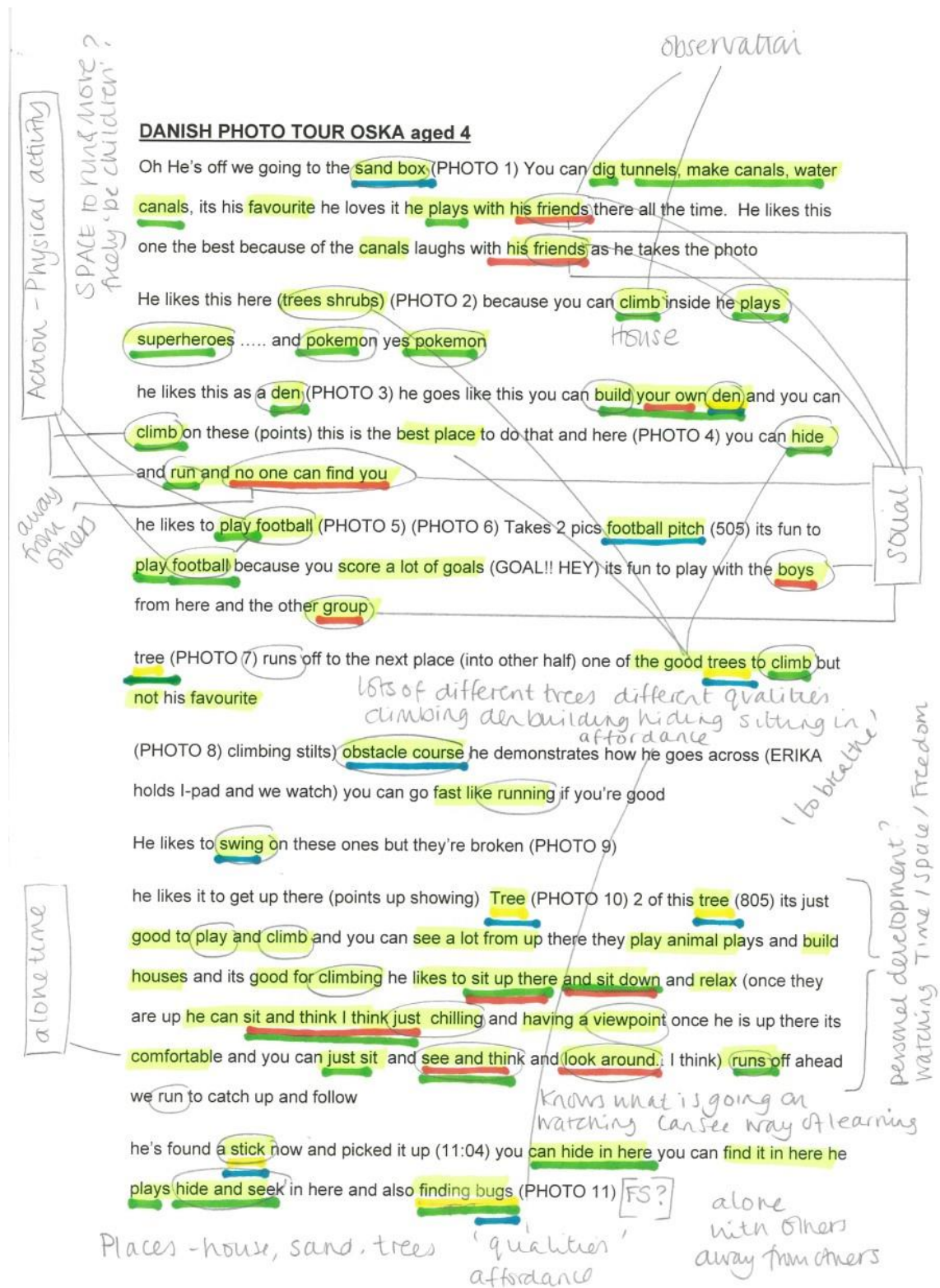a bit
repetitive make the
try to point (?) Is this
what she thinks I
want to hear? should be
saying? Is it different to
practice/reality - follow-up
children's experiences

how different?
natural differences
(earlier) or
'structured'
differences? How
far the same?
BALANCE

discovery learning
'explore' learn by
themselves
- repetition
- familiarity
= confidence   ?

Appendix 11 Photo tour (transcribed and annotated)

(handwritten annotation, top right) observation

(handwritten annotations, left margin, vertical) SPACE to run & more freely & 'more ? be children'
Action – Physical activity

DANISH PHOTO TOUR OSKA aged 4

Oh He's off we going to the sand box (PHOTO 1) You can dig tunnels, make canals, water canals, its his favourite he loves it he plays with his friends there all the time. He likes this one the best because of the canals laughs with his friends as he takes the photo

He likes this here (trees shrubs) (PHOTO 2) because you can climb inside he plays superheroes ..... and pokemon yes pokemon

(handwritten) House

he likes this as a den (PHOTO 3) he goes like this you can build your own den and you can climb on these (points) this is the best place to do that and here (PHOTO 4) you can hide and run and no one can find you

(handwritten, left margin) away from others

he likes to play football (PHOTO 5) (PHOTO 6) Takes 2 pics football pitch (505) its fun to play football because you score a lot of goals (GOAL!! HEY) its fun to play with the boys from here and the other group

(handwritten, right margin, vertical) Social

tree (PHOTO 7) runs off to the next place (into other half) one of the good trees to climb but not his favourite

(handwritten) Lots of different trees different qualities climbing den building hiding sitting in 'affordance'

(PHOTO 8) climbing stilts) obstacle course he demonstrates how he goes across (ERIKA holds I-pad and we watch) you can go fast like running if you're good

(handwritten, right margin, vertical) 'to breathe'

He likes to swing on these ones but they're broken (PHOTO 9)

(handwritten, left margin) alone time

(handwritten, right margin, vertical) personal development? watching Time / space / freedom

he likes it to get up there (points up showing) Tree (PHOTO 10) 2 of this tree (805) its just good to play and climb and you can see a lot from up there they play animal plays and build houses and its good for climbing he likes to sit up there and sit down and relax (once they are up he can sit and think I think just chilling and having a viewpoint once he is up there its comfortable and you can just sit and see and think and look around. I think) runs off ahead we run to catch up and follow

(handwritten) Knows what is going on watching Can see way of learning

he's found a stick now and picked it up (11:04) you can hide in here you can find it in here he plays hide and seek in here and also finding bugs (PHOTO 11) FS?

(handwritten, bottom) Places - house, sand, trees   'qualities' affordance   alone with others away from others

Appendix 12 Mapped photo tour (annotated)

A- Adult located here with activity, 'hub'of activity

3rd Adult 'floating' and moving around supporting as required - can see everything?

'fixed' resources in main / central area (house, tyre- pond, picnic tables)

Are they connected to adult activity or child -initiated?

Location of adults in pt? How much adult control / child - initiated?

play? freedom

Very few children playing outside, under a roof - maybe children do not see it as "first school"? quieter, calmer here

popular places (in this) section, pens house / den

Social interactions in communal places? House / den or in activities with adult

limited 'pathways' through fixed equipment and children limited 'physical' movement / activity flow?

Loose resources eg. buckets, sticks, books - Do children choose these? (puppets)

raised beds an adult 'focus' activity -tools? Safety need help or on own?

resensible secret places

Try few children bone to time - theops ollowthem round (Children + adults)

The school building is there all the time - ours invited key (forestry)

Appendix 13 Thematic map

Bibliography

Albrecht, M. (1954) 'The relationship between literature and society', *American Journal of Sociology* 59, pp. 425-436.

Alexander, R. (2001) 'Border Crossing: towards a comparative pedagogy', *Comparative Education*, 37 (4) pp. 507-523.

Apple, M.W. (2009) 'Understanding and interrupting Neo-liberalism and Neo-Conservativism in education', *Pedagogies: An International Journal*, 1 (1), pp. 21-26.

Archimedes Training (2012) Welcome to Forest schools Retrieved from http://www.forestschools.com/ (Accessed 6th February 2017).

Arsel, Z. (2017) 'Asking Questions with Reflexive Focus: A Tutorial on designing and Conducting Interviews'. Journal of Consumer research (forthcoming).

Aubrey, K. and Riley, A. (2016) *Understanding and using educational theories*. London: Sage.

Bailey, C. (1996) *A guide to field research*. Thousand Oaks CA: Pine Forge Press.

Bassey, M. (1999) *Case study research in educational settings*. Buckingham: Open University Press.

Bateson, G. (1955) A theory of play and fantasy. *Psychiatric Research Reports*, Vol. 2 39-51.

Beames, S. & Brown, M. (2014) 'Enough of Ronald and Mickey: Focusing on learning in Outdoor Education', *Journal of Adventure Education and Outdoor Learning,* 14 (2), pp. 118-131.

Bennett, N., Wood. L. and Rogers, (1997) *Teaching Through Play: Teachers' Thinking and classroom practice*. Buckingham: Open University Press.

Bentsen, P., Mygind, E. and Randrup, T. (2009) 'Towards an understanding of *udeskole:* education outside the classroom in a Danish context', *Education 3-13,* 37 (1), pp. 29-44.

Bilton, H. (2002) *Outdoor play in the early years: Management and innovation* (2nd ed.). London: David Fulton Press.

Bishop Grosseteste University (2015) *Ethics Policy*. Lincoln: Bishop Grosseteste University.

Blackwell, S. and Pound, L. (2012) 'Forest School in the early years', in Miller, L. and Pound, L. (eds.) *Theories and Approaches to learning in the early years 2012*, London: Sage, pp. 133-148.

Borge, A.I.H., Nordhagen, R. and Lie, K.K. (2003) 'Children in the environment: forest day-care centres modern day care with historical antecedents', *The History of the Family*, 8, pp. 605-18.

Borradaile, L. (2006) *Forest School Scotland: An evaluation*. Report to Forestry Commission Scotland and Forest Education Initiative Scotland.

Boyzatis, R. (1998) *Transforming qualitative information: Thematic analysis and Code development.* London: Sage.

Braun, V. and Clark, V. (2006) 'Using thematic analysis in psychology', *Qualitiative Research in Psychology,* 3 (2), pp.77-101.

Braun, V. and Clarke, V. (2013) *Successful Qualitative Research. a practical guide for beginners.* London: Sage.

Brinkmann, S and Kvale, S. (2015*) Interviews: Learning the craft of Qualitative research Interviewing*. London: Sage.

British Educational Research Association (2011) *Ethical Guidelines for educational research*. London: BERA. www.bera.ac.uk

British Educational Research Association Early Years Special Interest Group (2003) Early Years Research: Pedagogy, Curriculum and Adult Roles, Training and Professionalism. Available online at www.bera.ac.uk/files/review/beraearlyyearsreview31may03.pdf (accessed 23 March 2020).

Broadhead, P. (2004) *Early Years Play and Learning: Developing Social Skills and Co-operation.* London: Routledge Falmer.

Brock, A., (2014) Playing in the Early years. At liberty to play-Not only legal but statutory. In Brock, A., Jarvis, P. and Olusoga, Y. (eds), *Perspectives on Play. Learning for life*. Oxon: Routledge. pp 130-159.

Brooks, A. and Dahle, B. (2007) 'Is a tree transplanted to another continent the same tree? Some reflections on *Frilufstliv* in an international context', in B. Henderson, B. and Vikander, N. (eds.) *Nature First Outdoor Life the Friluftsliv Way 2007*. Ontario: Natural Heritage Books, pp. viii-xiv.

Brooks, R., te Riele, K. and Maguire, M. (2014) *Ethics and education research*. London: Sage.

Brostrom, S. (1998) 'Kindergarten in Denmark and the USA', *Scandinavian Journal of Educational Research*, 42 (2), pp. 109-122.

Brostrom, S. (2006) 'Children's perspectives on their childhood experiences', in Einarsdottir, and Wagner, J. (eds.) *Nordic childhoods and early education: Philosophy, research, policy and practice in Denmark, Finland, Iceland, Norway and Sweden 2006*. Connecticut: Information Age, pp.223-256.

Bromstrom, S. (2003a) 'Unity of care, teaching and upbringing. A theoretical contribution towards a new paradigm in early childhood education', in Lohmander, M.A. (ed.) *Researching early childhood: Care, Play and learning curricular for early childhood education 2003*. Goteborg: Goteborg University, pp. 21-39.

Bromstrom, S. (2003b) 'Transition from kindergarten to School in Denmark: Building Bridges', in Brostrom, S. and Wagner, J.T. (eds.), *Early childhood education in five Nordic countries: Perspectives on the transition from pre-school preschool to school 2003*. pp.39-75.

Brostrom, S., Frokjaer, T., Johansson, I., and Sandberg, A. (2012) 'Pre-School teacher's view on learning in preschool in Sweden and Denmark'. *European Early Childhood Education Research Journal* online
https://www.researchgate.net/piblication/265520954_Preschool_teachers'_views_in_Sweden_and_Denmark

Bruce, T. (1991) *Time to play in Early Childhood Education*. London: Hodder and Stoughton.

Bruce, T. (2004) *Developing learning in early childhood (0-8 years).* London: Paul Chapman.

Bruner, J. (1976) Nature and uses of immaturity. In J. S. Bruner, A. Jolly and K. Sylva (eds) *Play, Its role in development and evolution.* New York: Basic Books. pp 2-28.

Bruner, J.S. (1977) *The Process of Education*. Cambridge, MA: Harvard University Press.

Bruner, J.S. (1983) *Child's talk. Learning to use language*. New York: Norton.

Burke, C. (2008) 'Play in Focus: Children's visual voice in participative research', in Thomson, P. (2008) *Doing Visual research with children and young people 2008.* London: Routledge, pp.23-36.

Chi, M.T.H. (1996) Constructing self-explanations and scaffolded explanations in tutoring. *Applied Cognitive Psychology* 10 10-49.

Christensen, P. and Prout, A. (2002) Working in ethical symmetry in social research with children, *Childhood,* 9 (4), pp. 477-497.

Chung, S. and Walsh, D.J. (2000) Unpacking child-centredness: a history of meanings. *Journal of Curriculum Studies*, 32 (2) pp. 215-234.

Clark, A. and Moss, P. (2001) *Listening to young children. The Mosaic Approach.* National Children's Bureau and Rowntree Foundation.

Clark, A. and Moss, P. (2005) *Spaces to play. More listening to young children. Using the Mosaic approach.* National Children's Bureau and Rowntree Foundation.

Clark, M. and Waller, T. (2007) Early Childhood Education and Care: Policy and Practice. London: Sage.

Cohen, L., Manion, L. and Morrison, K. (2011) *Research methods in education.* Oxon: Routledge.

Collier, J. and Collier, M. (1986) *Visual anthropology: Photography as a research Method* Albuquerque: University of New Mexico.

Conroy, H. and Harcourt, D. (2009) 'Informed agreement to participate: beginning the partnership with children in research', *Early Child Development and Care,* 179, pp.157-165.

Constable, K. (2015) *The outdoor classroom on practice, ages 3-7 A month by month guide to Forest school provision.* Oxon: David Fulton Books.

Cree, J. (2009) 'Forest School and the Learning outside the classroom manifesto', *Horizons* 46, pp. 22-25.

Cree, J. and McCree, M. (2012) 'A brief History of Forest School- Part 1', *Horizons* 60, The Institute for Outdoor Learning. Forest School Association.

Cresswell, J. (2014) *Research design*. London: Sage.

Cutter-Mackenzie, A., Edwards, S. and Widdop Quinton, H. (2013) 'Child-framed video research methodologies: issues, possibilities and challenges for researching with children', *Children's Geographies* http://dx.doi.org/10.1080/14733285.2013.848598. (Accessed 9th June 2018).

Daniels, H. (2001) *Vygotsky and Pedagogy*. London: Routledge Falmer.

Danish Code of Conduct for Research Integrity (DCCRI), (2014) Copenhagen: Denmark.

Davis, B. and Waite, S. (2005) '*Forest Schools: an evaluation of the opportunities and challenges in early years',* Plymouth: University of Plymouth.

Denscombe, M. (2010) *The Good Research Guide*. Berkshire: Open University Press:

Denzin, N. K. and Lincoln, Y.S. (2011) *Handbook of Qualitative research*, 4th ed. London: Sage.

DfES (Department for Education and Science) White Paper, (1972) 'Education: A Framework for Expansion', London: Department of Education and Science.

DfES (Department for Education and Science) (2006) 'Learning Outside the Classroom Manifesto', Nottingham: HMSO.

DfE (Department for Education) (2008) 'Statutory framework for the early years foundation stage: setting the standards for learning, development and care for children from birth to five', Nottingham: HMSO.

DfE., (Department for Education) (2014) 'Statutory framework for the early years foundation stage' www.gov.uk/government/publications. London: DfE.

Dillon, J., Morris, M., O'Donnell, L., Reid, A., Rickinson M., and Scott (2005) *'Engaging and Learning with the Outdoors – The final report of the Outdoor Classroom in a rural context action research project'*, London: NFER and Kings College London.

Dockett, S. and Perry, B. (2005) 'You need to know how to play safe: children's experiences of starting school', *Contemporary Issues in Early Childhood,* 6 (1), 4-18.

Dockett, S. and Perry, B. (2007) 'Trusting children's accounts in research', *Early Childhood Research,* 5(1), pp. 47-63.

Dockett, S., Perry, B. and Kearney, E. (2013) 'Promoting children's informed assent in research participation', *International Journal of Qualitative Studies in Education*, 26 (7), pp.802-828.

Eastwood and Mitchell (2003) 'An evaluation of the first three years of the Oxfordshire Forest school Project', Oxford: Oxfordshire County Council.

Else, P. (2009) *The Value of play*. London: Continuum.

Eaude, T. (2011) *Thinking through pedagogy for primary and early years*. London: Sage.

Einarsdottir, J. (2005) 'Playschool in pictures: children's photographs as a research method', *Early child Development and Care,* 175 (6), pp. 523-541.

Einarsdottir, J. (2007) 'Research with Children: methodological and ethical challenges', *European Early Childhood Education Research Journal*, 15 (2), pp.197-211.

Elliott, H. (2015) 'Forest School in an inner city? Making the impossible possible', *Education 3-13*, 43(6), pp.720-728.

Ellyatt, W., House, T and Simpson, K. (2009) 'Developmental readiness: School Starting age and the dangers of *schoolification*', Open EYE submission to NUT consultation on the early years colloquium: London.

Ely,M., Vinz,R., Downing,M. and Anzul,M. (1997) *On writing qualitative research: living by words*. London: Routledge Falmer.

Fargas-Malet, M., McSherry, D., Larkin, E. and Robinson, C. (2010) 'Research with children: methodological issues and innovative techniques', *Early Childhood Research,* 8(2), pp.175-192.

Fjørtoft, I. (2004) 'Landscape as playscape: The effects of natural environments on children's play and motor development', *Children, Youth and Environments*, 14 (2).

Flick, U. (2014). *An introduction to qualitative research.* London: Sage.

Forest School Association website (2007) www.forestschoolassociation.org. (Accessed 6th June 2017).

Forest Kindergarten Policy Document (2015) Copenhagen: Denmark.

Garrick, R. (2009) *Playing Outdoor in the early years*. London: Continuum.

Garvey, C. (1977); (1990) *Play* 2nd Ed. Cambridge, MA. Harvard University Press.

Gilbert (2009) *Researching social life*. London: Sage.

Gill, T. (2007) *No Fear: growing up in a risk adverse society*. London: Calouste Gulbenkian Foundation.

Gray, D. (2012) *Doing research in the real world*. London: Sage.

Gray, C. and MacBlain, S. (2012) *Learning theories in Childhood*. London: Sage.

Greenfield (2011) 'Personal reflection on research process and tools: Effectiveness, highlights and challenges in using the Mosaic Approach', *Australian Journal of Early Childhood,* 36 (3), pp.109-116.

Greig, A. and Taylor, J. (1999) *Doing research with children*. London: Sage.

Grunbaum, N. (2007) 'Identification of ambiguity in the case study research typology: what is a unit of analysis?', *Qualitative Market research: An International Journal*, 10 (1), pp.78-97.

Guba, E. and Lincoln, Y. (1994) 'Competing paradigms in qualitative research', in Denzin N.K. and Lincoln, Y.S, (eds.) *Handbook of qualitative research 1994.* London: Sage pp. 00-00

Gov.uk https://www.gov.uk (Accessed: 23 January 2017).

Gulløv, E. (2003) 'Creating a natural place for children: an ethnographic study of Danish Kindergarten' in Fog Olwig. K. and Gulløv, E. (eds.) *Children's places: Cross cultural perspectives 2003*.London: Routledge, pp.23-38.

Hammersley, M. and Atkinson, P. (2007) *Ethnography: Principles in Practice*. 3rd Ed London: Routledge.

Harrison, H., Birks, M., Franklin, R., and Mills J. (2017) 'Case Study Research: Foundations and Methodological Orientations', *Qualitative Social research*, 18 (1) https://www.qualitative-research.net/ (Accessed: 5th May 2017).

Hart, R. (1997) *Children's participation: The theory and practice of involving young citizens in community development and environmental care*. London: Earthscan Publications.

Henderson, B. and Vikanger, N. (2007) *Nature First: Outdoor Life the Friluftsliv Way.* Canada: Nature Heritage Books.

Hill, M. (2005) 'Children's voices on ways of having a voice: Children's and young people's perspectives in methods used in research and consultation', *Childhood,* 3 (1), pp.68-89.

Hughes, B. (2012) *Evolutionary Playwork*. London: Routledge.

Jarvis, P., Brock, A. and Brown, F. (2014) Three Perspectives on Play. In Brock, A., Jarvis, P. and Olusoga, Y. (eds), *Perspectives on Play. Learning for life*. Oxon: Routledge pp12-41.

Jensen, J. (2011) Understanding of Danish Pedagogical Practice in Cameron, C. and Moss, P. (eds.) *Social Pedagogy and working with children and young people. Where Care and Education meet 2011*. London: Jessica Kingsley Pub, pp.141-159.

Jensen, A., Brostrom, S., and Hansen, O. (2010) 'Critical Perspectives on Danish Early Childhood Education and Care between the technical and the political', *Early Years* TACTYC Aarhus: Aarhus University Press. [vol 30 issue 3 Oct 2010].

Jordan, B. (2008) Scaffolding learning and co-constructing understandings. In A. Anning, J. Cullen, and M. Fleer (eds.) (2008) *Early Childhood Education: Society and Culture.* 2nd Ed. London: Sage.

Jordet, A. (2009) *Outlines: Outdoor learning in elementary schools*. Norway: University of Hedmark, Norway.

Joyce, R. (2012) *Outdoor Learning: Past and Present*. Maidenhead Berks: OU Press.

Kaplan, S. (1995) "The restorative Benefits of Nature: Toward an Integrative Framework." *Journal of Environmental Psychology* (15) pp 169-182.

Kelly, P., Dorf, H., Pratt, N. and Hohmann, U. (2014) 'Comparing Teachers Roles in Denmark and England', *Compare: A Journal of Comparative and International Education*, 44 (4), pp.566-586.

Knight, S. (2009) *Forest Schools and outdoor learning in the early years*. London: Sage.

Knight, S. (2012) *Forest School for all*. London: Sage.

Knight, S. (2013) *Forest Schools and outdoor learning in the early years*. London: Sage.

Knight, S. (2018) Translating Forest School: A response to Leather. *Journal of Outdoor and Environmental Education*. 21, pp.19-23.

Kristjansson, B. (2006) 'The making of Nordic childhoods', in Einarsdottir, J. and Wagner, J. (eds.) *Nordic Childhoods and early education: Philosophy, research policy and practice in Denmark, Finland, Iceland, Norway and Sweden, 2006.* Connecticut USA: Information Age Publishing Inc, pp.13-42.

Kumar, R. (2014) *Researching Methodology: A Step by Step Guide for Beginners*. London: Sage.

Kushner, D. (2007) 'Children's play; An analysis of how it is portrayed and why it is valued', in D. Justus Sluss and O.S. Jarrett (eds) *Investigating Play in the 21st century: play and Culture studies,* Vol 7. Lanham, MD: University Press of America. pp55-69.

Langsted, O. (1994) 'Looking at quality from the child's perspective' in Moss, P. and Pence, A. (eds.). *Valuing Quality in Early Childhood Services: New approaches to defining quality 1994.* London: Paul Chapman Publishing, pp.28-42.

Langston, A. and Doherty, J. (2012) *The revised EYFS in Practice Thinking, Reflecting and Doing!* London: Bloomsbury Pub.

Lapadat, J. and Lindsay, A. (1999) 'Transcription in research and practice: from standardization of technique to interpretative positionings', *Qualitiative Inquiry,* 5, pp.64-86.

Laslett, P. (1976) 'The wrong way through the telescope: a note on literary evidence in sociology and historical sociology', *British Journal of Sociology,* 27 (3), pp.319-342.

Leather, M. (2013) 'It's good for their self-esteem': the substance beneath the label', *Journal of Adventure Education and Outdoor Learning*, 13 (2), pp.158-179.

Leather, M. (2018) 'A critique of Forest School: Something lost in translation', *Journal of Outdoor and Environmental Education Outdoor Council of Australia,* 21, pp.5-18.

MacBlain, S. (2014) *How children learn*. London: Sage.

MacBlain, S. (2018) *Learning Theories for early years practice*. London: Sage.

Mackinder, M. (2017) 'Footprints in the woods: "Tracking' a child through a Forest School session', Education 3–13. http://dx.doi.org/10.1080/03004279.2015.1069368. (accessed 6th June 2018)

Marshall. J. (2014) *Introduction to Comparative and International Education*. London: Sage.

Massey, S. (2002) *The Benefits of a Forest School experience for children in their early years.* Unpublished Report for Worcestershire LEA.

Maynard, T. (2003) *Forest School, Swansea, Neath, Port Talbot: an evaluation,* Unpublished report (Swansea, University of Wales, Swansea).

Maynard, T. (2007a) 'Forest Schools in Great Britain: an initial exploration. *Contemporary Issues in Early Childhood,* 8 (4), 320-330.

Maynard, T. (2007b) 'Outdoor Play and Learning', *Education 3-13,* 35 (4), pp.305-307.

Maynard, T. (2007c) 'Making the best of what you've got. Adopting and Adapting the Forest School Approach', in Austin, R. (ed.), *Letting the Outside In 2007*. Stoke on Trent: Trentham Books, pp.75-84.

Maynard, T. (2007d) 'Encounters with Forest School and Foucault: A Risky Business', *Education 3-13,* (4), pp.379-391.

Maynard, T. and Waters, J. (2007), Learning in the Outdoor Environment: a missed opportunity, *Early Years*, 27 (3), pp.255-265.

Meckley, A. (2002) 'Observing children's play: mindful methods', paper presented to the International Toy Research Association, London, 13 August.

Merriam, S. (1988). *Case Study research in education: A qualitative approach.* London: Jossey-Bass Publishers.

Miles, M.B. and Huberman, A.M. (1994). *Qualitative data analysis.* London: Sage.

Ministry for Social Affairs (MSA) 2004 Lov om paedagogiske laereplaner (Act on Curriculum: The Day Care Act) Copenhagen: Ministry for Social Affairs.

Ministry for Social Affairs (MSA) 2014 [revised] Lov om paedagogiske laereplaner (Act on Curriculum: The Day Care Act) Copenhagen: Ministry for Social Affairs.

Mooney, C. (2013) *An Introduction to Dewey, Montessori, Erikson, Piaget and Vygotsky*. Red Leaf Press: St. Paul MN. USA.

Moyles, J. (2010) *The excellence of play*. 2nd ed. Maidenhead: Open University Press.

Murray, R. (2003) 'Forest School Evaluation Project. A Study in Wales', Report to the Forestry Commission by NEF (New Economics Foundation), London: New Economics Foundation.

Murray, R. and O'Brien, L. (2005) 'Such enthusiasm - a joy to see. An evaluation of Forest School in England' NEF Forest Research.

O'Brien, L. and Murray, R. (2006) 'A marvellous Opportunity to Learn. A participatory evaluation of Forest School in England and Wales', Forestry Commission.

OECD (Organisation for Economic Cooperation and Development) (2014) Education Policy Outlook Denmark www.oecd.org/edu/policyputlook.htm

OECD (Organisation for Economic Cooperation and Development) (2000) 'Background Report Thematic Review of Early Childhood Education and Care Policy in Denmark', The Ministry of Social Affairs, Copenhagen: Denmark.

Olusoga, Y. (2014) 'We don't play like that here': Social, Cultural and Gender perspectives on play. In A. Brock, P. Jarvis and Y. Olusoga (2014), (eds.), *Perspectives on Play. Learning for life*. pp 39-68. Oxon: Routledge.

O'Reilly, X. (2012) *Ethnographic Methods*. Oxon: Routledge.

Office for Standards in Education (OFSTED) (2004) Outdoor Education : Aspects of good practice HM 2151
http://www.ofsted.gov.uk/publications/index.cfm?fuseaction=pubs.displayfile&id=3719&type=pdf. (Accessed 5th May 2017).

Page, J., Clare, C., and Nutbrown, C. (2013) *Working with children and babies from birth to 3.* London: Sage.

Parten, M. (1932) Social participation among pre-school children. *Journal of Abnormal and Social Psychology.* 28 (3) p136-147.

Pelligrini, A.D. (1991) *Applied Child Study: A Developmental Approach,* Hillsdale, NJ. Lawrence Erlbaum.

Plowden Report (1967) 'Children and their Primary Schools' Central Advisory Council for Education (England). London: Her Majesty's Stationery Office HMSO. Volume 1 The report. http://www.educationengland.org.uk (Accessed 5th May 2017).

Pound, L. (2005) *How Children Learn. From Montessori to Vygotsky- Educational theories and Approaches made easy*. Leamington Spa: Step Forward Publishing.

Pre School Learning Alliance (2010) *A History of the Pre-School Learning Alliance.* http://www.preschool.org.uk. (Accessed 20th June 2018).

Punch, S. (2002) 'Research with children: the same or different from research with adults?', *Childhood,* 9(3), 321-341.

Pyle, A. and Danniels, E. (2017) A continuum of play based learning: The role of the Teacher in Play-Based pedagogy and the fear of hijacking play. *Early Education and Development* 28 (3) pp274-289.

Reed T. and Brown, M. (2000) The expression of care in the rough and tumble play of boys. *Journal of Research in Child Education*. Vol (15) 1 pp104-116.

Riley, J. (ed) *Learning in the Early Years*. London: Paul Chapman.

Roberts-Holmes, G. (2014) *Doing your early years research project. A step by step guide*. London:Sage.

Robson, C. (2002). *Real World Research*. Oxford: Blackwell.

Rogers, S. (2011) *Rethinking Play and pedagogy in early childhood education. Concepts, contexts, and cultures*. Oxon: Routledge.

Sandseter, E. B. (2006) 'Children's risky play in the Norwegian "barnehage" – a pilot study', oral presentation given to the 16th EECERA Annual conference, August, Reyjavik.

Sandseter, E.B.H. (2009) 'Characteristics of risky play', *Journal of Adventure Education and Outdoor Learning,* 9 (1), 3-21.

Sandseter, E.B.H. (2014) 'Early years outdoor play in Scandinavia', in Maynard, T. and Waters J. (eds.) *Exploring outdoor play in the early years*. Berks: McGraw Hill, pp.114-126.

Saracho, O. (1991) 'The role of play in the early childhood curriculum', in B. Spodek and O. Saracho (eds), *Issues in Early Childhood Curriculum,* New York: Teachers College Press.

SCAA (School Curriculum Assessment Authority) (1996) 'Nursery Education: Desirable Outcomes for Children's Learning on entering Compulsory Education and Employment'. London: Schools Curriculum Authority.

Scott, J. (1990) *A matter of record Documentary sources in social research*. Cambridge: Polity Press.

Scott, W., Reid, A., and Jones, N. (2003) *Growing Schools: The innovation Projects (2002-2003) External Evaluation.* Bath: Council for Environmental Education and University of Bath.

Silverman, D. (2011) *Interpreting Qualitative data*. London: Sage.

Simons, H. (2013) *Case study research in practice*. London: Sage.

Siraj-Blatchford, I. and Sylva, K. (2004) Researching pedagogy in English pre-schools. *British Educational Research Journal*, 30 (5) pp. 713-730.

Siraj-Blatchford, I., Sylva, K., Muttock, R., Gilden, R. and Bell, D. (2002) 'Researching Effective Pedagogy in the Early Years (REPEY)', DfES Research Report RR356. Norwich: DfES: HNSO. Available online at: www.dcsf.gov/research/uploadfiles/RR356.pdf (accessed 17th July 2018).

Smith, A., Duncan, J., and Marshall, K. (2005) 'Children's perspectives on their learning: exploring methods', *Early Child development and Care*,175 (6), pp. 473-487.

Stake, R. (1995) *The Art of case study research*. London: Sage.

Stephen, C. (2010) Pedagogy: the silent partner in Early Years learning. *Early Years,* 30 (1) p.1-14.

Sutton-Smith, B. (2001) *The Ambiguity of Play*, Cambridge, MA. Harvard University Press.

Swarbrick N., Eastwood G., and Tutton, K. (2004) 'Self Esteem and successful interaction as part of the Forest School project', *Support for Learning* 19 (3).

Thomas, G. (2016) *How to do your case study*. London: Sage.

Thomson, P. (2008) 'Children and young people voices in visual research', in Thomson, P. (ed.) *Doing visual research with young children and young people 2008*. London: Routledge, pp.1-19.

Therborn, G. (1993) 'The politics of childhood: the rights of children in modern times', in Castles, F.G. (ed.), *Families of nations: patterns of public policy in Western democracies,* Aldershot: Dartmouth, pp. 241-291.

Tovey, H. (2010) *Playing Outdoors. Spaces and places, Risk, and Challenge*. Berks: OU Press.

Twinn, S. (1997) An Exploratory study examining the influence of translation on the validity and reliability of qualitative data in nursing research. *Journal of Advanced Nursing,* 26 (2) pp. 418-423.

Vandenbroeck, M. and Bie, M. (2006) 'Children's agency and educational norms: A tensed negotiation', *Childhood,* 13 (1), pp. 127-143.

Vygotsky, L. S. (1978) *Mind and Society: the development of higher mental processes.* Cambridge, MNA: Harvard University Press.

Vygotsky, L.S. (1986) *Though and Language*, trans A. Kozulin. Cambridge, MA: Harvard University Press.

Vygotsky, L.S. (1990) Imagination and creativity in Childhood, *Journal of Russian and East European Psychology*, 28 (1), 84-96 http://dx.doi.org/10.2753/RPO1061-0405280184

Vygotsky L.S. (1997) The Historical Meaning of the Crisis in Psychology: a methodological investigation. In R.W. Reiber and A. Carton (Eds.), *The collected works of L.S. Vygotsky* trans. S. Sochinenii. Vol 3 pp. 233-343. New York: Plenum Press.

Wagner, J. and Einarsdottir, J. (2006) 'Nordic ideals as reflected in Nordic childhoods and early education in Nordic Childhoods and early education', in Einarsdottir , J. and Wagner, J.(eds.) *Philosophy, research policy and practice in Denmark, Finland, Iceland, Norway and Sweden 2006.* Connecticut USA: Information Age Publishing, pp.1-12.

Wagner, J.T. (2003) 'Introduction: International perspectives and Nordic contributions', in Brostrom, S. and J.T. Wagner, J.T. (eds.) *Early childhood education in Five Nordic countries: Perspectives on the transition from pre-school to school 2003*. Place: Pub, pp. 11-25.

Waite, S., Bolling, M. and Bentsen, P. (2015) 'Comparing apples and pears? A conceptual framework for understanding forms of outdoor learning through comparison of English Forest School and Danish *udeskole*', *Environmental Education Research*. http://dx.doi.org/10.1080/13504622.2015.1075193.

Waite S. and Davis, B. (2007) 'The contribution of free play and structured activities in Forest school to learning beyond cognition: an English case', in Ravn, B. and Kryger, N. (eds.) *Learning beyond cognition, 2007*. Copenhagen: the Danish University of Education, pp. 257-274.

Waite, S., Davis, B. and Brown, K. (2006) 'Forest School principles: Why we do what we do', (Final report) University of Plymouth: Devon: EYDCP.

Waite, S., Huggins, V. and Wickett, K. (2014) Risky Outdoor Play: embracing uncertainty in pursuit of learning, in Maynard, T. and Waters, J. (eds.) *Exploring Outdoor Play in the Early Years 2014.* Berks: OU Press, pp. 71-85.

Wall,S. Litjens,I. and Taguma, M. (2015) 'Early Childhood education and Care Pedagogy Review' DfE: OECD www.oecd.org/edu/earlychildhood

Warming, H. (2002) 'Quality of life from a child's perspective', *International journal of public administration special issue on 'life quality and social policy'.* Kobenhavn: Frydenland.

Waters, J. and Begley, S. (2007) 'Supporting the development of risk-taking behaviours in the early years: an exploratory study', *Education 3-13*, 35 (94), pp.365-377.

Watkins, C. and Mortimore, P. (1999) 'Pedagogy: What do we know?', in Moss, P. *Understanding Pedagogy and its impact on learning, 1999*. London: Paul Chapman Press, pp.1-19.

Wellings, E. (2012) 'Forest School National Governing Body Business Plan 2012', Carlisle: Institute for Outdoor Learning, available at www.outdoor-leanring.org (Accessed 20th April 2018).

DfES White Paper, (1972) 'Education: A Framework for Expansion'. Department of Education and Science. London: DfES.

Wilkinson, S. (1998) 'The role of reflexivity in feminist psychology', *Women's studies International Forum*, 11, pp.493-502.

Williams-Siegfredson, J. (2005) 'The competent child: developing children's skills and confidence using the outdoor environment: A Danish perspective', A paper presented at the British Educational Research Association Conference, University of Glamorgan: Wales.

Williams-Siegfredson, J. (2007) 'Developing pedagogically appropriate practice', in. Austin, R. (ed.), *Letting the Outside In 2007*. Stoke on Trent: Trentham Books, pp.63-73.

Williams-Siegfredson, J. (2012). *Understanding the Danish Forest School Approach. Early year's education in practice.* Oxon: Routledge.

Wood, E. and Attfield, J. (2005) *Play, Learning and the early Childhood Curriculum.* 2nd Ed, London: Paul Chapman.

Wood, E. (2009) Developing a pedagogy of play in A. Anning, J. Cullen and M. Fleer (eds). *Early Childhood Education. Society and Culture*. pp. 27-63 London: Sage.

Wood, E. (2010) Developing Integrated Pedagogical Approaches to Play and Learning in P. Broadhead, J. Howard, and E. Wood (eds.) *Play and Learning in the Early Years*. pp. 9-26. London: Sage.

Wood, E. (2013) *Play, Learning and the Early Childhood Curriculum*. London: Sage.

Wood, P. and Smith, J. (2016) *Educational Research: Taking the plunge*. Wales, Carmarthen: Independent Thinking Press.

Wright, H. (2015) *The Child in Society*. London: Sage.

Yin, R. (1994). *Case study research. Design and methods*. London: Sage.