

Abstract

The study investigated the perceptions of children and parents relating to the Forest School initiative. The aims of the research were to explore children's and parents' perceptions of Forest School and consider the potential influence Forest School can have on children's learning and development. The study explored these views within a setting that had implemented the Forest School initiative at a whole primary school level for a number of years. A qualitative approach was taken and the study used thematic analysis of key concepts and codes. Emerging themes were drawn from children's and parents' comments and main themes were identified.

The study found that children were able to communicate the fun, excitement and enjoyment they had experienced when talking about Forest School as an initiative. Children conveyed a caring attitude and respect for nature and the outdoor environment and that it was important for them to look after their surroundings. Parents expressed that they valued the initiative and that supporting their children's education at home was important. However, they felt that children took the Forest School initiative for granted and perhaps saw it as a privilege. In relation to children's learning, a key theme was children's apparent enthusiasm and desire to learn. The Forest School experience enabled children to develop and reinforce a multitude of key skills. With regard to children's development, references were made to a growing sense of awareness and maturity. Concepts of trust and responsibility were conveyed with some reference to a growing sense of freedom being afforded to children as they get older.

Further research could seek to establish which professionals are aware of the existence of Forest School and gain their perceptions of its potential benefits. Also, further exploration focusing on the difference in Forest School experiences between the Foundation Phase and Key Stage 2 could provide interesting results. This takes into account the perceived impact the Forest School initiative appears to have contributed to, in relation to the children's and parents' perspectives and the context of this study.

**The Forest School initiative and its perceived impact on
children's learning and development: An investigation
into the views of children and parents**

Mark Close

Word Count 44,994

**Words include all chapters and references within the text,
excluding heading, references and appendices.**

Erratum

Since the award of the Doctorate in Educational Psychology that this thesis constitutes a partial fulfillment, two pages have been identified as being direct copies of a corresponding section from an earlier Masters thesis by Dr. Sarah Fitzgibbon (2011). This fact was not acknowledged in the text of the original thesis. This omission has now been addressed by the inclusion of this erratum, a reference to Dr. Fitzgibbon's thesis in the reference section, and a reworking of the two pages following the sentence on page 10. "The following section of text (2.2.2), which contains a detailed description of the approach taken by Forest Schools, was rewritten after the original section was identified as being directly copied from the earlier Masters thesis by Dr. Sarah Fitzgibbon (2011)".

Abstract

The study investigated the perceptions of children and parents relating to the Forest School initiative. The aims of the research were to explore children's and parents' perceptions of Forest School and consider the potential influence Forest School can have on children's learning and development. The study explored these views within a setting that had implemented the Forest School initiative at a whole primary school level for a number of years. A qualitative approach was taken and the study used thematic analysis of key concepts and codes. Emerging themes were drawn from children's and parents' comments and main themes were identified.

The study found that children were able to communicate the fun, excitement and enjoyment they had experienced when talking about Forest School as an initiative. Children conveyed a caring attitude and respect for nature and the outdoor environment and that it was important for them to look after their surroundings. Parents expressed that they valued the initiative and that supporting their children's education at home was important. However, they felt that children took the Forest School initiative for granted and perhaps saw it as a privilege. In relation to children's learning, a key theme was children's apparent enthusiasm and desire to learn. The Forest School experience enabled children to develop and reinforce a multitude of key skills. With regard to children's development, references were made to a growing sense of awareness and maturity. Concepts of trust and responsibility were conveyed with some reference to a growing sense of freedom being afforded to children as they get older.

Further research could seek to establish which professionals are aware of the existence of Forest School and gain their perceptions of its potential benefits. Also, further exploration focusing on the difference in Forest School experiences between the Foundation Phase and Key Stage 2 could provide interesting results. This takes into account the perceived impact the Forest School initiative appears to have contributed to, in relation to the children's and parents' perspectives and the context of this study.

Acknowledgements

The author would like to thank the following people, without whose support and commitment, this piece of work would not have been possible.

My thesis tutor, John Gameson, for his support and guidance and being the 'critical friend' that I desperately needed on this journey.

The staff, children and parents of the chosen school in this study, without whose enthusiasm, flexibility and understanding this research would not have been possible.

My family and friends for their understanding, especially Ethan, 'Yes, I am going to be a doctor.'

Mam and Dad, for always believing in me, and giving me their love and support to help me pursue my dreams.

To Jo, my wife, for her unwavering support, love and patience in helping my dreams become a reality.

List of abbreviations

BPS	British Psychological Society
DfEE	Department for Education and Employment
DoH	Department of Health
EP	Educational Psychologist
ERIC	Educational Resources Information Centre
FEI	The Forestry Education Initiative
FS	Forest School
INSET	IN Service Training
KS2	Key Stage 2
LA	Local Authority
NEF	New Economics Foundation
POF	Public Opinion of Forestry
PsycINFO	Psychology Information database
SEN	Special Educational Needs
UK	United Kingdom
UNCRC	United Nations Convention on the Rights of the Child
UNICEF	United Nations International Children's Emergency Fund
WAG	Welsh Assembly Government

List of Contents

Abstract	ii
Erratum	iv
Abstract	iv
Acknowledgements	vi
List of abbreviations	vii
List of Tables	xv
List of Figures	xv
Chapter 1 – Introduction	1
1.1: Amplification of the title	2
1.2: Theoretical significance	3
1.3: Relevance to education and educational psychology	4
Chapter 2 – Literature Review	7
2.1: Introduction to the literature review	7
2.2: What is Forest School?	9
2.2.1: Forest School - History behind the concept	10
2.2.2: Forest School principles	11
2.2.3: Espoused psychological benefits of Forest School for children	13
2.2.4: Limitations of the research to date	18
2.3: Voice of the child	20
2.3.1: Rights of the Child – UK and European legislation	21
2.3.2: Children's views in research and education	22
2.4 The challenge of risk	26
2.4.1: Parental pressures	26
2.4.2: Risk and safety	28
2.4.3: Age of technology	30
2.4.4: Nature Deficit-Disorder	30
2.4.5: Adults' views in relation to outdoor learning	31
2.5: Learning and development	32
2.5.1: Experiential learning theories	32

2.5.2: Theories relating to child development	37
2.5.3: Importance of middle childhood	42
2.5.4: Developmental psychology theories	47
2.5.5: Legislation in Wales and outdoor education	50
2.6: Summary of the rationale for the current study	52
2.6.1: Research Questions	52
Chapter 3 – Design	53
3.1: Introduction	53
3.2: Research paradigm	53
3.2.1: Qualitative methods	53
3.2.2: Strengths and limitations of qualitative methods	55
3.2.3: Mixed methods	57
3.3: Validity and reliability	57
3.3.1: Internal validity	58
3.3.2: External validity	58
3.3.3: Internal reliability	59
3.3.4: Researcher's position	60
3.3.5: External reliability	60
3.4: Procedure	61
3.5: Data collection	65
3.5.1: Semi-structured interview with children	65
3.5.2: Pilot interviews	66
3.5.3: Interview schedule	67
3.5.4: Links between the research questions and interview schedule	68
3.5.5: Materials	71
3.5.6: Focus groups with parents	72
3.6: Data analysis	73
3.6.1: Detailed account versus rich description	76

3.6.2: Theoretical approach versus inductive approach	76
3.6.3: Semantic versus latent themes	77
3.6.4: Epistemology: essentialist/realist versus constructionist	77
3.6.5: Method of data analysis	78
3.7: Generalisability	82
3.8: Ethical issues	82
Chapter 4 – Findings	84
4.1: Introduction	84
4.2: How the data have been organised and presented	84
4.2.1: Details of the sample used	85
4.3: Q1. What are children's perceptions of the Forest School initiative?	86
4.3.1: A: Feelings	86
4.3.2: A1: Positive feelings	86
4.3.3: A2: Negative feelings	88
4.3.4: A3: Fun and enjoyment	89
4.3.5: B: Outdoor Experience	91
4.3.6: B1: Appreciation of surroundings	92
4.3.7: C: Community	94
4.3.8: C1: Whole school approach	94
4.3.9: C2: Resources	95
4.4: Q2. What are parents' perceptions of the Forest School initiative?	96
4.4.1: D: The classroom 'outside'	97
4.4.2: D1: Parents value the opportunity of Forest School	97
4.4.3: D2: Importance of 'outdoors'	99
4.4.4: D3: Computer age generation	99
4.4.5: E: Communication	100
4.4.6: E1: Transfer of understanding at home	101
4.4.7: F: Children 'undervalue' experience	102

4.4.8: F1: Parents perceive Forest School as 'the norm'	102
4.4.9: F2: Surroundings taken for granted	104
4.4.10: G: Home influence	105
4.4.11: G1: Support from home	105
4.4.12: G2: Parents' understanding of the Forest School initiative	106
4.5: Q3. What potential influence can Forest School have on children's learning and development?	107
4.5.1: H: Learning	108
4.5.2: H1: Richness of experience	108
4.5.3: H2: Key skills	110
4.5.4: H3: Inside versus outside	114
4.5.5: H4: Cross curricular opportunities	116
4.5.6: I: Child Development	117
4.5.7: I1: Maturity / awareness	117
4.5.8: I2: Notion of safety	119
Chapter 5 – Discussion	122
5.1: Introduction	122
5.2: A: Feelings	122
5.2.1: A1: Positive feelings	122
5.2.2: A2: Negative feelings	123
5.2.3: A3: Fun and enjoyment	123
5.3: B: Outdoor experience	124
5.3.1: B1: Appreciation of surroundings	124
5.4: C: Community	124
5.4.1: C1: Whole school approach	125
5.4.2: C2: Resources	125
5.5: D: The classroom 'outside'	126
5.5.1: D1: Parents value the opportunity of Forest School	126

5.5.2: D2: Importance of 'outdoors'	127
5.5.3: D3: Computer age generation	127
5.6: E: Communication	128
5.7: F: Children 'undervalue' experience	128
5.7.1: F1: Parents perceive Forest School as 'the norm'	129
5.7.2: F2: Surroundings taken for granted	129
5.8: G: Home influence	129
5.8.1: G1: Support from home	130
5.8.2: G2: Parents' understanding of Forest School	130
5.9: H: Learning	130
5.9.1: Psychological theories relating to learning	131
5.9.2: H1: Richness of experience	133
5.9.3: H2: Key skills	133
5.9.4: H3: Inside versus outside	134
5.9.5: H4: Cross curricular opportunities	134
5.10: I: Child Development	135
5.10.1: I1: Maturity	135
5.10.2: I2: Notion of safety	136
5.11: Limitations	138
5.11.1: The sample	138
5.11.2: Response bias	139
5.11.3: Skills of researcher	139
5.11.4: Data collection	140
5.11.5: Context	140
5.11.6: Analysis	140
Chapter 6 – Conclusion	142
6.1: Introduction	142
6.2: Theories guiding the research	142

6.3: Summary of overall findings	143
6.3.1: Q1. What are children's perceptions of the Forest School initiative?	143
6.3.2: Q2. What are parents' perceptions of the Forest School initiative?	144
6.3.3: Q3. What potential influence can Forest School have on children's learning and development?	144
6.4: Enhancing children's experiences	145
6.5: Future Research	146
6.6: Implications for education	147
6.7: Implications for the practice of educational psychologists	148
References	151
Appendix 1: Ethics proposal	164
Appendix 2: Consent letter to the Local Authority	168
Appendix 3: Email to head teacher	170
Appendix 4: Consent letter to parents for their child's participation in interview and parental participation in a focus group	172
Appendix 5: Consent form for children participating	174
Appendix 6: Script to be read to interviewees before interview commences	175
Appendix 7: Debrief Sheet	176
Appendix 8: Thank you letter for children who participated	177
Appendix 9: Semi-structured interview questions for children	178
Appendix 10: Selection of photographs of Forest School activities	179
Appendix 11: Positive and negative feeling cards	180
Appendix 12: Focus group schedule for parents	185
Appendix 13: An example of an interview transcript with additional comments	186
Appendix 14: Initial codes generated from children's interviews	199
Appendix 15: Theme of positive feelings based on children's interviews	200
Appendix 16: Focus group transcript with additional notes	207
Appendix 17: An example of parent's comments organised into themes	217
Appendix 18: Initial thematic map – Q1	221
Appendix 19: Final thematic map – Q1	222
Appendix 20: Thematic map – Q2	223
Appendix 21: Thematic map – Q3	224

List of Tables

Table 1 – A typology of values of nature (Kellert, 2002, p.130)	41
Table 2 – Response for child / parent consent form	63
Table 3 – Explanation of the rationale behind the interview schedule, Q1 - children's perceptions	68
Table 4 – Explanation of the rationale behind the interview schedule, Q2 - parents' perceptions	70
Table 5 – Explanation of the rationale behind the interview schedule, Q3 - learning and development	71
Table 6 – Details of the sample used for semi-structured interviews with children	85
Table 7 – Details of parental sample used for the focus group	85
Table 8 – Children's perceptions of the Forest School initiative.....	86
Table 9 – Parent's perceptions of the Forest School initiative	97
Table 10 – Children's and parents' perceptions of how the Forest School initiative may affect learning and development.....	108

List of Figures

Figure 1 – Kolb's experiential learning cycle.....	33
Figure 2 – Types of nature experiences and modes of learning in childhood development	38
Figure 3 – Word cloud showing the main words taken from sub-theme A1: positive feelings	90
Figure 4 – Word cloud showing the main words taken from sub-theme A3: fun and enjoyment	90

Chapter 1 – Introduction

This study explored the perspectives of children and parents in relation to the Forest School (FS) initiative. An amplification of the title and definitions of the key words and terminology used throughout the study are provided in this chapter. The theoretical significance of the topic is discussed in relation to education and educational psychology, with the remainder of the study introduced.

Davis (1998) suggests that the early years pioneers, such as Froebel (Lawrence, 1952) and Montessori (Kramer, 1976), recognised that “children’s learning and development were greatly enhanced through direct experiences of nature and natural materials” (Davis 1998, p. 119). Hands-on, experiential learning has traditionally been seen as an important aspect of early childhood education. This has been identified by Rushton and Larkin (2001) who state that children learn best when in a rich, stimulating environment; they construct meaning from real life applications and the probability of learning is greater when all the senses are used simultaneously.

Kahn and Kellert (2002) observe that:

It would not be too bold to assert that direct and indirect experience of nature has been and may possibly remain a critical component in human physical, emotional, intellectual, and even moral development. Despite this possibility, our scientific knowledge of the impact of the significance of nature during varying stages of childhood is remarkably sparse (p. vii).

If, as Kahn and Kellert postulate, there is so little evidence, the question could be asked about why it is assumed that learning outdoors is beneficial. In contrast to Kahn and Kellert’s assertion, many researchers believe that the value of learning outdoors for young people has been researched and recognised (Rickinson et al. 2004; Nicol, Higgins, Ross & Mannion, 2007; Lovell, O’Brien & Owen, 2010). It is beyond the scope of this research to advocate the case for outdoor education and outdoor play. What this research will attempt to highlight is the perspectives of children and parents regarding the perceived benefits of an outdoor learning initiative, FS.

1.1: Amplification of the title

There is no discernible definition of FS. Knight (2011) describes it as a “dynamic phenomenon that presents itself in different ways in different places” (p. 1). This has been viewed as problematic by researchers attempting to unravel what makes FS unique from other outdoor learning experiences. For the purpose of this study, FS is a “process that offers children regular opportunities to achieve, and develop confidence through hands-on learning in a woodland environment” (Murray & O'Brien, 2005, p. 11). The notion behind the FS initiative seeks to adopt a flexible approach to learning, through an adaptable context. Children are given opportunities to learn through a number of learning approaches: kinaesthetic, visual, linguistic and interpersonal. This can allow for rich outdoor experiences to be provided for children to learn in different ways, which can also play an important part in their overall development.

FS is being used with a range of children and young people within the United Kingdom (UK). This includes early years settings, primary schools, children and young people with special educational needs (SEN) and behavioural and medical difficulties (Knight, 2011). A decision was taken to focus primarily on children aged between five and ten in an attempt to gather perspectives from the Foundation Phase and Key Stage 2 (KS2). This was something that had not previously been reported clearly and therefore highlighted one of the novel contributions of this study.

The topic was chosen because there appears to be increasing interest within Wales in engagement with outdoor learning (Forestry Commission, 2010) and the FS initiative in particular. Much is made of the espoused benefits of this initiative, yet, it would appear that the majority of findings to date are based on inference or observations that are subjective and potentially biased. Also, it would appear that the methodologies and procedure for many of these studies is poorly demarcated, which calls into question the reliability and validity of the claims being made.

Much of the previous research has sought the perspective of adults directly involved in delivering the FS initiative, such as teachers, FS leaders and parents. Yet little opportunity seemed to be provided for arguably those most affected by the process, the children themselves. It is for this reason that the voice of the child was seen as paramount in this study, to provide their thoughts and perspectives regarding the FS initiative. Thus, the

second novel contribution of this study was highlighted, to promote the voice of the child within FS research.

It was decided that a qualitative perspective would be the most appropriate method of gaining individual's perspectives. The study involved in-depth analysis of how participating in the FS initiative may impact on children's learning and development, from the perspective of children. Also, in light of the claims of Griffiths, Elniff-Larsen and Jones (2010) that parents reported a ripple effect at home as a result of their children participating in FS, exploring parental perspectives would be of interest. Parental perspective with regard to an outdoor learning approach, such as FS, was also deemed to be an interesting viewpoint, given the societal concerns and pressures relating to time, safety and technology. The title for this study reflects the exploratory nature of the research, obtaining views of children and parents using a methodology that does not appear to have been adopted in previous studies. By adopting this exploratory approach, it allowed for a more rounded, holistic stance to be taken, rather than an approach that focused on a narrow, reductionist and predictive viewpoint.

The children in this study were aged between five and ten with an equal gender split. Interviews were carried out with ten children, with two additional pilot interviews. A semi-structured interview format with open ended questions was used to elicit informative and honest responses from participants. A focus group with six parents was also conducted to gain a parental perspective of the FS initiative. Interview transcripts and the focus group transcript were analysed using an inductive thematic analysis which searched for semantic themes from an essentialist/realist approach (Braun & Clarke, 2006). Main themes and sub-themes that were generated for each research question were linked back to the literature, related to education and educational psychology and some concluding points were offered at the end of the process. Conclusions were linked to related research within the field of psychology; these links were highlighted using the literature review and the findings from this study.

1.2: Theoretical significance

The potential benefits of outdoor education have been connected to a wide range of subject areas, ranging from child development to psychology. These benefits include increases in confidence (Rickinson et al. 2004), social skills (Jenner & Hughes, 2006),

motivation and concentration (Wentzel & Watkins, 2002), knowledge and understanding (Kellert, 2002) and sensory experiences (Kellert, 2002; Chawla, 1988). All of these areas can be directly linked to educational psychology. These areas link to a wider theoretical base within psychology including; experiential learning (Kolb, 1994), cognitive, affective and evaluative development (Kellert, 2002), self-efficacy (Bandura, 1997), positive psychology (Chawla, 1990; Elliot & Davis, 2004), reflective practitioner (Schon, 1983, 1987) and multiple intelligence (Gardner, 1983). The perspectives gained from children and parents in this study may highlight how an initiative such as FS can have psychological benefits for children's learning and development. The role of the educational psychologist (EP) could be informed by having a greater awareness of the potential impact outdoor learning experiences could have for all children, not just children with SEN. This study is therefore relevant to educational psychology and the role of the EP, the following section will expand on this relevance.

1.3: Relevance to education and educational psychology

As this research has been conducted within Wales, a focus on the educational developments that have taken place within Wales, as opposed to the UK, was taken. Since the advent of devolution in 1999, the Welsh Assembly Government (WAG) has devised an education system that is felt to be appropriate to Wales. In 2001, a vision document for education in Wales, 'The Learning Country', (WAG, 2001) defined plans for an essential review of approaches to early years education. This subsequently led to proposals for a Foundation Phase curriculum (WAG, 2003; 2004; 2007a) for children aged between three and seven. Children's well-being and personal and social development are centred at the very heart of the Foundation Phase, yet critics argued that the difference in approaches when children entered KS2 was marked. The new curriculum aimed to address the perceived over-formalisation of children's early years experiences, promoting a more play-based approach to children's learning in both indoor and outdoor environments. The Foundation Phase in Wales (WAG, 2008a) was built on the principle that early years provision could offer a sound foundation for future learning, through a developmentally appropriate curriculum:

Children learn through first-hand experiential activities with the serious business of 'play' providing the vehicle. Through their play, children practise and consolidate their learning, play with ideas, experiment, take risks, solve problems, and make

decisions individually, in small and in large groups. First-hand experiences allow children to develop an understanding of themselves and the world in which they live. The development of children's self-image and feelings of self-worth and self-esteem are at the core of this phase (p. 4).

The FS initiative has strong links with the above statement and research appears to have focused primarily on the Foundation Phase age range, three to seven. Although a great deal of emphasis has been placed on the undoubted importance of these early years experiences, it would appear that ages six to twelve have been neglected in previous FS research. Erikson (1968), Sobel (1993) and Kellert (2002) all advocate the importance of 'middle childhood', yet very few FS studies report samples of this age being included in their data. Later in the literature review, the importance of middle childhood shall be discussed. Another novel contribution of this study, in view of education was to consider The views of children in middle childhood and understand the impact of FS on these children's learning and development.

Burden (1996) argues that educational psychologists (EPs) commonly do things to children and for children, yet far too infrequently, do things with children. The "Educational Psychology Services Report of the Working Group" (Department for Education and Employment, DfEE, 2000) reports that EPs are well placed to ensure children's views are both elicited in a neutral way and included in plans being proposed for them. However, evidence suggests children are often left out of the decision making process (Rose, 2005) and more is required to access and promote children's views and their involvement (MacConville, 2006, Todd, 2003a, 2003b).

In the conclusion of this study, suggestions will be made relating to the stance of Miller, Billington, Lewis and DeSouza (2008) that critical qualitative research methodologies, such as the one adopted in this study, can allow EPs to:

- grapple with contests between knowledge and experience;
- overcome barriers between research and practice;
- better equip the practitioner to work with children and young people.

A comprehensive literature review is provided in chapter two, related to the FS initiative. A thorough introduction to the topic to be investigated is provided, detailing the history, principles and espoused benefits FS is claimed to deliver. Critical observations of key research studies are also provided and consideration was given to how the literature links to the research questions posed. Also contained in the literature review are links to research and psychological theory. Sections consider children's voice, parental pressures and how FS may affect learning and development. Key studies relating to FS were discussed and critiqued, with gaps in the research highlighted, leading to a rationale for this study. Detailed accounts of rationale, theory and research are given.

A detailed account of the methodology is described in chapter three. A qualitative research paradigm was adopted to construct a methodology that utilises formal research methods. The rationale behind the research paradigm is presented, with the strengths and limitations considered. Discussion around reliability and validity, sample and procedure are also provided. The ethical considerations taken into account in this study are also explicitly stated. Details of the data collection, interview format, data analysis and method are outlined in this chapter.

The findings of the study are presented in chapter four. This included verbatim extracts and information from the chosen sample. Main themes and sub-themes are presented within the appropriate research questions and linked to extracts taken from the analysis.

In chapter five, the main themes and sub-themes are discussed. The nine main themes and relevant sub-themes are presented and discussed, with links to psychological theory. To conclude the chapter, the limitations of the study are presented.

The study is concluded by chapter six, revisiting the initial questions posed and summarising the findings. Future research is suggested and implications for education and educational psychologists are suggested. A full list of references and set of appendices are presented at the end of the study. Items include coded transcripts of one child's interview and the parent focus group, interview questions for children and parents and the original ethical proposal.

Chapter 2 – Literature Review

2.1: Introduction to the literature review

Forest School is an outdoor education initiative introduced in the UK that encourages children to learn in an outdoor environment. This research focuses on the perceptions of children and parents in relation to the Forest School initiative. Also, the potential influence Forest School may have on children's learning and development is explored.

The literature review shall focus on four key areas that this study seeks to investigate, the FS initiative, the voice of the child, perceived risks for parents and how the outdoor environment could have benefits for children's learning and development.

The FS initiative will be the first key area of interest. As the primary focus of the study a comprehensive account of the history and research around FS will be provided. This allows for a greater understanding of the initiative and provides a context to present the espoused psychological impact of the initiative. A brief summary of its history shall be given alongside the underlying principles associated with the initiative. Research into the potential benefits of FS for children shall then be considered. From this research a number of psychological benefits have been suggested and these will be thoroughly reviewed and critiqued where appropriate. Some limitations of the research carried out into the FS initiative shall also be explored. Important gaps in the research literature will be highlighted with one specific area being focused upon, the lack of children's perspective.

The second key area examines the literature surrounding the voice of the child. This has been established as a key area within this review as a study of this nature, namely how the voice of the child is obtained and analysed, is critical to gaining a genuine perspective. The importance of the United Nations Convention on the Rights of the Child (UNCRC) (United Nations International Children's Emergency Fund, UNICEF, 1989) and UK legislation is considered, as well as the importance of children's voice for educational psychology. Methods employed to gather children's perspectives are discussed, with some strengths and limitations of these methods explored. The section concludes with the areas where children have been able to provide their thoughts and opinions to inform policy through research and the efforts made to gather the voice of the child in FS research.

The third section considers parental perspectives. The importance of establishing the social and cultural influences that can affect parents' thinking is an important part of this literature review. Establishing these areas provides a window to a better understanding of the contextual factors surrounding parents' perspectives with regard to media influence, risk factors and advances in technology. Also explored in this section is a concept called 'Nature Deficit-Disorder' (NDD) and how this construction may exacerbate parental concerns. The section concludes by exploring existing FS research that has gained the perspective of parents.

The fourth and final section will look at psychological theory and educational policy within a Welsh context. This section is split into two parts focusing on cognitive development and child development respectively. Where applicable, psychological theories are linked with the FS initiative. Due to a major focus of the FS initiative being on outdoor learning and the outdoor environment, exploring experiential learning theory is considered essential. One theory that has underpinned much of the literature on outdoor experiences is Kolb's experiential learning cycle (1984). As the theory draws upon the processes of problem solving, creativity and action research, it would appear to share strong links with the FS initiatives approach to learning. It is for this reason that Kolb's experiential learning theory was considered.

When exploring the literature on child development, it should be noted that no one theory is sufficient to provide a full explanation. As a result, a range of psychological theories focusing on child development and the importance of the environment are presented. Kellert's (2002) conceptual framework was explored due to the direct link it proposes between experiencing nature and child development (for a more detailed account see pages 36 to 42). Piaget's (1971) stages of development and his theory of assimilation and accommodation have strong links with Kolb's experiential learning cycle. It is also important to note that this study makes the distinction between 'the natural environment' as in nature, trees and creatures and 'a natural environment' such as the family home or classroom. A number of theorists: Erikson (1963); Sobel (1993) and Kellert (2002); state the importance of middle childhood, ages six to twelve. As a result, this area was felt worthy of investigation, given this study was conducting research with children within this age range.

As this study has been conducted within Wales, relevant legislation underpinning the education system, such as the Foundation Phase in Wales, and how this relates to FS is addressed. Links to the potential benefits of outdoor learning are also considered. The review is concluded with the rationale that underpins the study and the research questions to be explored.

The literature search was performed using Cardiff University library and its online journal database. Books, journals and articles thought to have particular links to this study have been researched and where relevant their references were considered for further exploration. A number of other databases, ERIC (Educational Resources Information Centre), OVID SP and PsychINFO have also been used. Terms such as 'outdoor learning', 'experiential learning', 'FS', 'children's views' and 'children's voice' were used to locate a wide range of articles and journal publications. Websites that were deemed suitable for this particular study, such as the British Psychological Society (BPS), Forestry Commission and the WAG have also been used to search for relevant documents.

2.2: What is Forest School?

There are an increasing number of FS in the UK. Some are supported by Local Authorities (LAs), whereas others emerge from the Forest Education Initiative. However, there is not a single approach to FS. Knight (2009) asserts "I have become convinced that FS offers a unique opportunity to children to experience the outdoors in a way that facilitates their holistic development and fosters their growth as confident and competent learners" (p. 9).

FS is being used with a range of children and young people within the UK. This includes early years settings and primary schools, with children and young people with SEN, behavioural and medical difficulties (Knight, 2011). The notion behind the FS initiative seeks to adopt a flexible approach to learning through an adaptable context. Children are given opportunities to learn through a number of learning approaches: kinaesthetic, visual, linguistic and interpersonal. This can allow for rich outdoor experiences to be provided for children to learn in different ways, which can also play an important part in their overall development.

2.2.1: Forest School - History behind the concept

Research about the history of the FS concept suggests that it originated in Scandinavia in the 1950s. Some researchers such as Knight (2009) report that the way of working outside with young children was developed in Denmark in the 1950's called 'skogsbørnehaven', 'skog' meaning wood or forest and 'børnehaven' meaning kindergarten. However, Griffiths et al. (2010) suggest that the concept originated in Sweden, again during the 1950s, and was adopted in Denmark in the 1980s to support its early years education policy for pre-school children. In 1994, staff from the early years department at Bridgwater College visited Denmark and saw groups of children playing outside in woodland. On their return, staff began to develop what is now known as FS (Bridgwater College, 2004). There are cultural differences with regard to how FS has been developed within the UK compared to Scandinavia. It could be argued that Scandinavian culture is more attuned to access the environment when compared to the UK. Throughout Scandinavian education, the interconnectedness between humanity and nature has long been recognised (Kellert, 2002; Louv, 2005). Knight (2009) suggests that the Scandinavian model is firmly rooted in the philosophies of Froebel (Lawrence, 1952) with "free play, creativity, socialisation and emotional stability at its centre" (p. 5). Whereas, the UK mainstream pedagogic agenda has been strongly influenced by a more positivist paradigm (Russell, 1970).

Following Bridgwater College's development of training courses and standard qualifications, the next organisation to be interested in the potential of FS was the Forestry Commission. A number of documents were produced in 2002 and 2003 (O'Brien & Tabbush, 2002; Render, 2003) recognising the importance of the outdoor environment and FS and how the Forestry Commission were committed to supporting the initiative throughout the UK. The Forestry Education Initiative (FEI) oversees the education work of the Forestry Commission, more recently, the Forestry Commission have published documents in both Scotland (2009) and Wales (2010) providing a guide to the benefits of the FS approach.

"The following section of text (i.e., 2.2.2), which contains a detailed description of the approach taken by Forest Schools, was rewritten after the original section was identified as being directly copied from the earlier Masters thesis by Dr. Sarah Fitzgibbon (2011)".

2.2.2: Forest School principles

Knight (2009) proposes a set of guiding principles or key elements that underpin the FS initiative, and the following section reprises Knight's principals and elements:

The use of a woodland setting, which is not a usual one

Knight advocates that FS sessions ideally take place in a woodland setting, but recognizes that sessions can equally well take place in another outdoor area. Knight suggests that a FS session can be classed as such because FS rules will apply, which may be different to other environments such as school, a classroom or home. Strict safety routines and boundaries are established which encourage child-initiated learning and creative approaches to learning to take place. Murray and O'Brien (2005) state that "The woodland setting is particularly important for children from areas of Britain where there is little opportunity for contact with the natural environment" (p. 6).

FS is made as safe as possible in order to facilitate risk taking

During each session, rules are established by the FS leader and children taking part. These rules are underpinned by the premise that the setting is not necessarily a familiar one and therefore being safe is a high priority. Once children have developed their understanding of safety and risk, they are presented with opportunities to assess and take calculated risks in an environment that is felt to be safe. However, in today's society, children may not always want to take risks for a number of reasons, this issue will be discussed further in section 2.4, p. 27.

FS happens over time

FS should be experienced over a period of time. Children may spend a half a day once a week for ten weeks, or they may attend for longer. Knight draws on her own experience when suggesting that settings tend to start with the ten-week model, and then be extended as benefits are recognised. The desired outcomes of FS are to create long-term benefits, and as such, children need opportunities to repeat the experience and reinforce learning opportunities. Murray and O'Brien, (2005) and Knight (2009) suggest that children benefit from attending FS sessions regularly. However, this review has been unable to locate research that underpins the length of time that is most appropriate.

There is no such thing as bad weather, only bad clothing

Knight indicates that a popular saying amongst FS leaders is that there is no such thing as bad weather, only bad clothing. There is an expectation that children should attend in all weathers so they have opportunities to learn that getting wet can be fun, and getting too hot or too cold can be managed. The school that was the focus of this thesis invested in waterproof clothing for every class to ensure children were able to participate. High winds are the only recognised time when it is deemed unsafe to carry out FS sessions.

Trust is central

Reciprocity between children and adults in respect to following FS rules is paramount. Trust is implicit for all involved when taking part in FS sessions. Time is spent getting to know pupils at the start of a group with explicit teaching about the FS way. Knight reports that it is "For those children to whom the environment they are entering is strange...it is vital for them to trust the adults if the experience is to be a positive one" (Knight, 2009, p. 17).

Learning is play-based and, as far as possible, child-initiated and child-led

Knight makes reference to FS being "an internal process of holistic development" (p. 17) which can be used to connect children with who they are, with their peers and with the environment around them. Forest School, especially for early years children, is play-based and, as far as possible, child-initiated and child-led. Knight (2009) suggests that having two or more hours for a session can ease the time constraints on children and practitioners, enabling open-ended deep play with facilitated risk-taking. Children are encouraged to explore and follow their own agenda, and consider their interactions with each other and the adults supporting them.

Sessions have a beginning and an end

Knight claims that FS can be a "powerful emotional experience" which children need to be ready for, "This may be a celebration with parents invited in, or a campfire with special food" (Knight, 2009, p.17). When children experience FS, the sessions follow a similar structure at the beginning and the end. This can include the use of specific clothing and resources such as log circles and the world around them.

Trained staff

The Forestry Commission, who are largely responsible for training, recommend that sessions are run by a trained FS leader. This is to preserve the ethos, and to ensure that risks are appropriate and 'safe enough'. The leaders are assisted by others, such as school staff and often parents of the children taking part, to ensure a ratio appropriate to the setting and the children.

2.2.3: Espoused psychological benefits of Forest School for children

Whilst it must be noted that the following cited research studies have been commissioned by bodies that have a vested interest in FS; for example The Forestry Commission, there is such research which suggests that children participating in FS commonly show improved physical and motor skills, language and communication skills (Davis & Waite, 2005), social skills including team working (Murray & O'Brien, 2005), knowledge and understanding of the environment, increased self-confidence and self-belief (Murray & O'Brien, 2005) and increased motivation and concentration (Murray & O'Brien, 2005). Each of these espoused benefits will be discussed in turn and the limitations to these claims highlighted.

Confidence

Self-confidence is the judgements that are made relating to whether or not a person can do something; Bandura (1997) termed this as self-efficacy. FS aims to provide opportunities for children to attend an outdoor environment regularly over a period of time, providing opportunities to build self-confidence (Knight, 2010; Murray & O'Brien, 2005). Confidence is a characteristic valued by many, and is often one that parents and teachers want for children. It is argued that this approach can encourage ownership of the outdoor space and the relationship each child builds with the outdoor environment. As a result, children's confidence can be built. Rickinson et al. (2004) concluded that when outdoor learning took place in the participant's school grounds or community it resulted in "greater confidence, renewed pride in community, stronger motivation towards learning and a greater sense of belonging and responsibility" (p. 6). These factors would need further exploration in terms of FS to be able to justify such claims. For example, Rickinson et al. (2004) make the assertion that greater confidence and renewed pride enhance motivation and feelings of belonging, this has not been established through controlled research and therefore remains as conjecture. Routines that are consistent and secure are implemented, which allow children to understand the boundaries that can promote

freedom, trust and a learning environment to explore and take measured risks. Murray and O'Brien (2005) state "Self-confidence and self-belief comes from children having the freedom and time and space given to learn, grow and demonstrate their independence" (p. 32). Children can construct their own learning through flexible, child-led activities. Katz (1995) suggests it is not what children are born with that counts so much, but what they are allowed to do and who they are encouraged to be. As a result, young children's levels of confidence can be influenced by their early experiences, successes and failures.

Swarbrick, Eastwood and Tutton (2004) tentatively explored the relationship between self-esteem and successful learning through FS and concluded that it can help raise children's confidence. However, it must be noted that the authors have based their conclusions on second hand information in the form of reports and questionnaires from other studies and projects. One of these was a questionnaire sent out to 100 participating schools, where 29 were returned 'correctly' completed. However, there is no clarification about the sample population of the posted or returned questionnaires, other than reference to the Foundation Stage, Key Stage 3 and 4. As no clarification of the role of the adult responding is given, or what phase of education they were working at, the relationships between self-esteem and learning discussed in this paper should be interpreted with some caution.

Social skills

Through FS children are encouraged to identify their own strengths and recognise the value they bring to relationships. Murray and O'Brien (2005) argue that FS can increase pupils' awareness of the consequences of their actions and their ability to work co-operatively with others. They learn to value the contributions of others and opportunities to develop social behaviours such as sharing, co-operating, empathising and supporting are encouraged (Jenner & Hughes, 2006). A counter argument may suggest that a school's ethos should cater for all these factors as a matter of course. A study by Roe (2008) indicated that participation in FS can help young people at risk of social exclusion control their anger. Some of the limitations of this study relate to the generalisability of the findings. The group with the most significant changes attended a special behaviour school, therefore, pupils may have been subject to exclusions or a managed move previously. The very small number of participants and the uncertainty in attributing improvements in

behaviour to a forest setting and not the school they attend does leave the research open to criticism.

Language and communication

In FS, opportunities are provided for children to regularly express feelings, communicate socially through verbal and non-verbal communication, take-turns, negotiate and listen to others. Again, it could be argued that these opportunities should be afforded to pupils in school through their pastoral and SEN curriculum. Children should have access to developing language and communication every day, not just once a week as is the case with FS. Murray and O'Brien, (2005) relate this improvement in communication to the visual and sensory experiences FS can facilitate. Children can be inspired by their surroundings to learn new words, create scenarios and imaginative play and act out stories ranging from 'Bear Hunts' to 'The Hobbit'. Claims are made that following FS sessions, increases have been noted in children's developed use of language and improved vocabulary through spontaneous talk and descriptive language (Maynard, 2003; Davis & Waite, 2005). However, Maynard does warn that there is uncertainty whether these findings are attributable to FS, child development or classroom teaching. Moreover, the claims made by Davis and Waite's study have not been substantiated, as the references are all unpublished documents and therefore, their methodologies have not been accessible. Also, the authors propose when interactions between adults and children had "no adult agenda" it resulted in "considerable...language benefits" (2005, p.19). This proposition seems to be based purely on observation, with no formal assessment taking place. It would appear that the impact FS may have on language and communication would need more robust research to quantify any potential benefits.

Motivation and concentration

A child's interest can motivate their desire to learn with outdoor environments able to stimulate curiosity and imagination (Murray & O'Brien, 2005). Murray and O'Brien also assert that children have been observed solving problems, discovering new things, ideas and concepts. It is also espoused that children demonstrate "A keenness to participate in exploratory learning and play activities and an ability to concentrate on tasks for extended periods." (Murray & O'Brien, 2005, p. 32).

Physical skills

Children's quality of movement, both fine motor and gross motor, can be supported, challenged and developed through FS. Children can be afforded the space to learn and experience their environment in a tactile manner in a range of weather conditions.

Knowledge and understanding

Murray and O'Brien (2005) claim that FS can stimulate curiosity, exploration and observation. The environment can be used to channel children's thirst to learn and explore. Murray and O'Brien (2005) believe that this can support children to develop a greater respect and interest for the environment and their natural surroundings. Children's knowledge is inspired by child-initiated exploration facilitated by trained practitioners. Understanding is able to develop over time through repetition, however this is not unique to FS. Pupils' sense of pride and confidence can be seen to develop which, in turn, promotes a sense of ownership towards the outdoor environment. It must be noted that the evidence that pupil's sense of pride and confidence was developed is anecdotal at best.

New perspectives

FS is seen as a holistic approach that focuses on the whole child, allowing school staff to see children's interests, talents, and personalities in a different environment. The children are given the chance to develop relationships with adults in an environment independent of classroom constraints. That environment respects individuality, fosters confidence and social skills that can influence their learning when they return to a more formal environment. In 1967, Charles Mand, one of the early writers on education outdoors commented that teachers become more human 'at camp' and there is a "chance for pupil and teacher to view each other under new conditions and a chance for teachers to take another look at children, their goals and motivations without the restriction of the classroom" (p. 30). These comments touch on the social constructivist notion of the need for formal and informal pupil-teacher interaction to allow learners to take more control of their learning (Adams, 2006) both outside and inside the classroom.

Ripple effects beyond Forest School

Teachers have reported gaining new experience and skills to inform their teaching practice and adapt their pedagogical approach (Murray & O'Brien, 2005). Parents' interest and understanding of FS is also changing over time in relation to the all weather conditions

(Knight, 2009). Children's interest in the environment has been reported as having benefits for more formal learning within a classroom context. Murray and O'Brien (2005) stated that it is important both parents and teachers are involved from the beginning of FS in order to be able to gain an understanding of what the initiative entails. Murray and O'Brien also proposed that the interest and attitude of parents improved as they saw the impact of FS on their children. Murray and O'Brien (2005) noted that long term contact with the FS initiative is essential to enable children to develop confidence and learn at their own pace. Griffiths et al. (2010) postulate that children should experience FS for a minimum period of a year, as it allows children to feel ownership of the woodland, observe seasonal changes and hone their practical skills development.

Lovell et al. (2010) state that FS is probably the most widely documented and researched education and learning initiative which takes place in woods and forests. However, as shall be highlighted in section 2.2.4, p. 18, this research is, to date, fairly limited. It would seem from anecdotal evidence and the evaluations conducted on FS that the individuals involved derive much satisfaction and enjoyment from the experience. The research to date also implies that there are tangible benefits for children's personal and social development that build on their social skills, self-esteem, confidence and independence. All of which are important elements in a child's development. However, these implications may not necessarily be based on robust evidence and Lovell et al. do not elaborate on their assertion why FS is so widely documented and researched.

Empirical research specifically looking into FS in the UK has all been conducted within the last decade and published in the main by Forest Research of the Forestry Commission, the New Economics Foundation (NEF) and Forest Education Initiative (NEF, 2004; Borradaile, 2006; Murray & O'Brien, 2006; Jenner & Hughes, 2006; Roe, 2008; O'Brien, 2009). There is a potential vested interest by those conducting the research which could result in a biased perspective. However, further studies have been undertaken by researchers from other institutions and organisations (Swarbrick et al. 2004; Davis and Waite, 2005; Massey, 2005; Davis, Rea & Waite, 2006; Maynard, 2007a; Maynard, 2007b) evaluating the benefits of FS and these studies in the main share similar conclusions. Many of the evaluations of FS have used participatory methods to collect data from teachers, FS leaders and parents.

There is a growing body of research about how the outdoor environment provides positive memories (Chawla, 1990; Elliot & Davis, 2004). Positive, whether they promote a sense of well being, or because they are vivid and enduring (Knapp & Benton, 2006). Waite, Davis and Brown (2006a) state that children interviewed about FS sessions were able to recall memories from the previous week and further back “Children were able to recall problems, fun, feelings of companionship, collaborative endeavours, rules, knowledge of nature and things they had learned or were in the process of learning” (p. 29). Waite et al. (2006a) believe that this information shows children were actively engaged cognitively, emotionally and physically when involved in FS activities. It is important to note that there is no statistical evidence underpinning this belief and that the research by Waite et al. (2006) was written for the Forestry Commission, which may lead to bias. Observations made by Waite et al. (2006a) also suggest that all children’s senses were engaged through their outdoor experiences. This would imply children’s sensory experience can also be enhanced through the FS initiative. Kellert (2002, p. 139) believes that it is the “extraordinary sensory diversity and variability of the natural world” that provides such a rich context for learning. As well as having a positive impact on children’s learning, Chawla (1988) argues that natural environments can have an impact on the development of children’s sensitivity and caring attitudes towards nature and augment their environmental knowledge and understanding. The majority of the research reviewed concluded that the specific woodland context in which these educational experiences took place was beneficial for the children participating.

2.2.4: Limitations of the research to date

Limitations to some of the aforementioned studies are that they focus on a small number of case studies. Furthermore, the context of each FS may be different and one of the concerns of the FS movement has been to identify what makes it distinct from other outdoor activities for children. There is uncertainty whether this distinctiveness has been found. Many of the evaluations have studied children over a relatively short period of time, and there have been calls to undertake more longitudinal studies to track improvement (Davis & Waite, 2005). This could ascertain the long term benefits for children and whether these are sustained and developed.

All of the studies describe, to some extent, the methods used, although some studies provide greater detail than others. In general, there is little information regarding the methods employed, how they were used and on whom. It is the view of this study, that it

could be seen as problematic when considering the reliability of findings, given the lack of clarity around methodology. Control groups or pilots do not appear to have been employed in many of these studies. The design of the evaluations can also be called into question. The 'evidence' and 'findings' is somewhat misleading, as much of what is reported is based on inferential discussion of the potential benefits of FS. Design and methodology does not appear to be rigorous enough to generate causal conclusions. Also, the lack of control groups makes it extremely difficult to produce reliable evidence based on scientific processes and procedures. Although these points are largely recognised in the evaluations, greater emphasis should be placed on the 'findings' being indicative rather than based on rigorous evidence, with a disclaimer noting caution.

The paradigm chosen by researchers is predominantly qualitative. A range of participants from children, parents, teachers to FS leaders took part in interviews, although interviews with children took place in group or whole class scenarios (Murray & O'Brien, 2005; Jenner & Hughes, 2006). Questionnaires were used in a number of studies, yet there is little detail about the questions asked. Most of the studies employed observational methods. The FS initiative appears to be viewed as being most effective in the Foundation Phase, with only a few reported examples of primary school participation at a whole school level and a lack of recognised examples at secondary level.

Most of the participants in the studies were below the age of six. Relating educational gains would therefore be difficult. Many of the studies call for longitudinal research to be carried out looking at this area. Several of the evaluations conclude that FS experiences allow children to initiate their 'own learning' (O'Brien & Murray, 2006). Though the aforementioned authors claim children were motivated to learn and proactively seek out new learning experiences this claim cannot be substantiated. The majority of the findings from studies already discussed are based on inference regarding the benefits of FS or observations that are subjective and potentially biased.

When discussing the espoused psychological benefits for children, the claims made appear to be predominantly anecdotal (Murray & O'Brien, 2005; Swarbrick, et al. 2004). Maynard, (2007a) notes that there is a need for caution when making claims of impact of – and on – children's self-esteem and too great an emphasis may be placed on children's 'preferred' learning styles. Maynard's evaluation (2003) found no measurable change to

self-esteem or self-confidence in participants, although the sample size was very small, five participants. This was in contrast to FS leaders, observing that FS had a 'profound' effect on the children, that they were "happier and more alive" (p. 17). The teachers in Maynard's evaluation did not observe such an impact and felt that this happiness was observed as much during FS as it was in the classroom. Maynard highlights the "limitation of relying on impressions of different groups of individuals who may be influenced by their feelings about FS" (p. 18).

It is not the purpose of this study to clarify what makes FS distinct from other approaches or to evaluate the perceived benefits for children. What this section does show is that the anecdotal evidence would seem worthy of further investigation within a study that employs a rigorous methodological framework. This study explored the views of the children and parents on FS through direct interview and how FS may impact on children's learning and development.

2.3: Voice of the child

This section will look at the literature surrounding the voice of the child. The importance of the UNCRC (UNICEF, 1989) and UK legislation shall be considered, as well as the importance of children's voice for educational psychology. Research focusing on obtaining children's voice shall also be considered.

Discussions about the voice of the child have typically revolved around whether adult professionals are willing to listen to children, and how listening can be done successfully. These discussions have focused on complex debates relating to children's competencies, age and maturity, and the credibility of their statements, in affect assessing whether children's voices can be taken seriously, and at what age this might be possible. Listening to children's voices can be insightful, since their perspectives are able to "inform the development of school-level inclusive policies and practices" (Campbell et al. 2002, p. 152). Warming (2011) asserts that there is a serious lack of research on, and methodological debate about, how researchers can access children's voice, especially younger children. However, Clark and Statham (2005) state that there has been considerably more interest in the last decade in the subject of children's participation and listening to children's voice. This is a view shared by May (2005) who suggests "the

number of research projects concerning the voice of the child is escalating” (p. 29). It would seem there is a dissonance as, on the one hand, there is interest in accessing children’s voice, and on the other, there is the practicality of designing rigorous methodological studies that appropriately and ethically seek children’s views. This study focused on the little understood perspectives of children, and parents, about FS. This ensured children’s voice could be understood and considered in debates around how FS may impact on children’s learning and development.

2.3.1: Rights of the Child – UK and European legislation

In the UK, the Children Act (Department of Health, DoH, 1989) set up a legal requirement to consult about the wishes and feelings of children when assessing their physical, emotional and educational needs. The Act itself has had a direct impact on the decision makers, agencies and professionals who work with children on a daily basis. It also kindled the interest of researchers in designing and improving the reliability and validity of techniques for obtaining children’s voice.

Alongside the Children Act, the UNCRC (UNICEF, 1989) provided a landmark in the development of children’s rights. The legislation intended to demarcate rights for children and express vision and hope in terms of both their safety and participation in society. The UNCRC was adopted by the United Nations in 1989 and ratified by 177 nations by September 1995, including the UK. As a result, children across societies were acknowledged as having rights as individuals. Part of those rights involved being able to express their views on matters which concern them. Broadly speaking, in educational terms, the UNCRC declares that children have the right to participate in decision making, have equal opportunities in accessing an appropriate education and to be protected from harm. The WAG has gone a stage further by stating it has adopted the UNCRC as the basis of all its work for children and young people in Wales. This work has resulted in the publication of seven core aims that relate to the ‘Children and Young People: Rights to Action’ document (WAG, 2006). Children’s Commissioners have been established, in Wales (2001) and in England (2004), to champion children’s rights.

Article 12 of the UNCRC states “Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child” (p. 4). This governs schools and LAs to ensure that children are provided with the opportunity to express their views on matters of concern to them and that their views are

given due weight. Within Wales, the establishment of Funky Dragon, the Children and Young People's Assembly (WAG, 2004) gives opportunities for children and young people to be heard on issues that affect them and to be involved in decision making at a national level. This emphasises the importance of listening to the voice of the child in research studies such as this, where children's voice can be explored in a meaningful way.

2.3.2: Children's views in research and education

Evidence from literature supports the view that when children are given a voice and responsibility in their schooling they can provide insight, clarity and a valid alternative perspective. In 2007, Funky Dragon (WAG, 2007b) published '*Why do people's ages go up and not down? Our Rights – Our Story*', which asked 2,525 children, aged seven to ten in Wales to what extent they felt they were able to access their rights. In response to article 31 of the UNCRC regarding play, 93% named an outdoor space or activity when asked where they like to play. Article 29 related to education, where only 18% of children reported that they enjoyed the learning aspect of school, highlighting a lack of variation and interest in their lessons. Children seemed to want opportunities to play at home and in school, but these were not being afforded to them.

Nicol et al. (2007) noted positive perceptions of education and learning outdoors amongst Scottish children and young people. They found that children and young people valued a broad range of opportunities, from formal, curriculum-based to more informal, recreational and family orientated education and learning. The authors noted that the most highly valued experiences were:

- fun and enjoyable;
- novel;
- ones which allowed the children and young people to feel uninhibited, 'free', and close to nature through practical activities, encounters with animals and exposure to the weather;
- ones which gave the participants opportunities to set their own agenda and to work at their own pace.

An alternative viewpoint suggests that some professionals may view with alarm any shift in the balance of power between themselves and their clients, teachers and children. How much are children perceived as 'invisible' when examining the context of schooling other than the recipient of other people's decision making? Claxton (2008) writes in his book

entitled “What’s the point of school?” that young people have a good idea of what they want from schools. He acknowledges the voice of the child from 1967 with children discussing ‘The school that I’d like’ (p. 27/29). Claxton argues that the views young people expressed in 1967, though valid and well constructed, have received little attention and that not much has changed in schools during the last forty years. It is the view of this study that giving children a voice in decision making allows them to be visible and gives them an integral stake in that process. Exploring children’s voice about FS could provide new perspectives or alternative ways of thinking about school and how children can be affected.

Many adults decide what is best for children and young people. When this is taken from the perspective of a parent and professional in context, this would seem appropriate. However, as has been noted previously in this section, children have rights, and also perspectives that are unique to themselves. Lewis and Lindsey (2002) state that researching children’s voice can be a fascinating and rewarding task. It is a researcher’s task to ensure that careful consideration is given to the questions asked and also the manner in which research is constructed. This ensures children’s voice is not simply listened to by researchers, but also heard by a much wider audience.

Some previous FS research has sought the voices of children. The majority of studies have used participatory methods, as described previously, in whole class or group discussion (NEF, 2004; Murray & O’Brien, 2005; Jenner & Hughes, 2006; Griffiths et al. 2010). One piece of research as part of the Davis and Waite study (2005) sought the voice of the child, however only edited highlights are provided in the document. This piece of work does not provide a coherent methodology with regard to participants’ age, gender, and a rationale for the methods selected for data collection. However, the little detail that exists about this study would indicate that obtaining children’s voice about FS is worthwhile and important.

In order to ensure the voice of children was included in research on the FS initiative; children were given the opportunity to express their views, thoughts, feelings and experiences of FS situations to add a unique viewpoint to the steadily growing body of existing literature. Waite, Davis and Brown (2006a) state “the lack of pupil voice constitutes a major weakness of a proposed system of self-evaluation of Forest School” (p.

27). The authors believe that a limited number of pupil comments appear to be filtered through several layers of adult interpretation. It would seem that researchers are aware of the lack of explicit focus on children's voice with regard to the FS initiative, yet little research has been carried out specifically looking at this area. Harding and Atkinson (2009) state the need to continue to explore issues surrounding the voice of the child. They believe this is paramount to enabling further understanding of how best to listen to children and allow them to play an active role in their education.

Gersch (1996) believes that pupils' genuine involvement is impossible without appropriate vehicles for them to convey their beliefs, thoughts and experiences. A number of practical guides to consulting with children and young people have been produced (Lancaster & Broadbent, 2003; Fajerman & Treseder, 2004). Educational psychology service referral forms and person centred plans often contain sections for recording children's voice and emphasis is placed on its importance. However, there are gaps as highlighted by Clark and Statham (2005). The first is that research has tended to focus on the views of older children and young people, often those aged eight and older (Tunstall & Aldgate, 2001). Secondly, a characteristic of most literature on children's participation is that it has focused on their involvement in service planning, delivery and evaluation, either at an individual level or at the more systemic level. While this is noteworthy, it could be argued that this reflects largely the agenda of adults who need to ensure services provided are appropriate and effective.

The level of active engagement in children's participation varies and is often seen in the degrees of power sharing between adults and children. Hart's 'ladder of participation' (1995) illustrates this in the form of steps which describe the degree to which children are in control of the process, up to the eighth level where children initiate the process and invite adults to join them in decision making. Adapted from Arnstein's model (1969) Hart poses questions relating to which children are included, how children's comments are interpreted and how to make participation more meaningful. All of these are potential barriers that researchers must take into account when working alongside children. Hart's model could be criticised for the assumption that participation at the lower levels is less valuable. Non-participation can still be a form of participation provided a choice was afforded to the participant. However, this study advocates that it is important for any study exploring the voice of the child to consider these barriers during the planning stages of a

study to ensure the level of children's participation is appropriate. With Hart's ladder of participation (1995) in mind and by reviewing the literature, it would seem that children's participation has moved forward in the past decade, but each step forward highlights how much more researchers, practitioners and policy makers need to learn in order to make the process an effective one.

Researchers have tended to focus on using traditional techniques, such as interviews and focus groups for children and young people to articulate their voice, an approach adopted by this study. A review of literature in Bitou and Waller (2011) shows that most of the research designs applied in early years settings are based on adult-designed techniques. However, researchers such as Clark and Moss, (2001, 2005) have developed exploratory methods, such as the Mosaic Approach, for eliciting the voice of children, especially young children. In the literature on exploratory methods it would seem there is a broad consensus that the interpretation of children's voice is generally made from an adult point of view. As Clark and Moss (2005) write, "Children are the ones with the unique knowledge to impart and debate with adults" (p. 81). It could be argued that involving children in research this way has the potential to devalue the validity and reliability of the research findings, whereas more standardised methods could claim more rigorous findings.

Within the field of educational psychology, EPs would appear well placed to engage in research directly with children and young people. In addition, EPs hold a unique position in working with individuals at a number of levels enabling them to disseminate outcomes. Fallon, Woods and Rooney (2010) state that:

EPs are fundamentally scientist-practitioners who utilise, for the benefit of children and young people, psychological skills, knowledge and understanding through the functions of consultation, assessment, intervention, research and training, at organisational, group or individual level across educational, community and care settings, with a variety of role partners. (p. 4).

It is currently unclear how many EPs are aware of FS and its espoused psychological benefits for pupils (section 2.2.3, pages 13 to 18). The above statement seems to suggest that EPs could be ideally placed to carry out future FS research.

2.4 The challenge of risk

As previously stated, FS is believed to be the most widely documented and researched education and learning initiative which takes place in woods and forests. However, given FS has only been established for just over a decade, the research base that exists about its educational and psychological benefits is limited. This section considers the role of parents and society, and how they might contribute to children's contact with their outdoor environment.

2.4.1: Parental pressures

A parent's role is to help their child prepare for life as a self-sufficient adult and with this comes a transfer of power. Sooner or later, parents have to respond to the demands from children for greater responsibility. Social and cultural influences appear to be having an effect on this transfer. Dangers of traffic, crime and strangers may have all influenced parental thinking. Indeed, it could be argued that the constant change in direction by governments and the media is as detrimental to children as it is to their parents. Furedi (2001) asserts that panicking is likely to make parents fret even more about their children and increase their insecurities and hang-ups that they have about their abilities as parents. Different parents have different norms and expectations, but where people succeed in resisting these forces, it may be due to their ethos or set of values about risk, experiential learning and self-sufficiency in their children's lives.

In 1971, eight out of ten children aged seven or eight years old went to school on their own. By 1990, that figure had dropped to less than one in ten. A report by the Future Foundation in 2006 suggested that parents today spend much more time looking after their children than previous generations, showing an increase from 25 minutes a day to 99 minutes, quadrupling within the last 25 years. One hypothesis for this increase was parents' fear of children playing unsupervised. This report also showed that the public believed the opposite view, that parents spent less time with their children than they used to. A two year study by Valentine (2004) documenting the perceptions of parents who had children between the ages of eight and eleven, found evidence that risk, or perceptions of risk are socially constructed (Valentine, 2004). The majority of parents believed that children were more at risk than they have been in the past. It appears that few parents are comfortable allowing their children anything like the freedom that they themselves perhaps took for granted.

Carlton and Winsler (1998) indicate that young children have a general and innate need to master their environment, which is intrinsically rewarding. However, if children feel they are controlled by others, then their natural curiosity is reduced. Dweck (2000) suggests that risk can have positive implications for children's development. Dweck concludes that risk permits children to push themselves to the limits of their capacities, encouraging them to progress. Rising to challenges, taking on risks and having an 'I can do it' attitude are important characteristics of effective learners. Dweck believes that these characteristics result from the attitudes of people around them. FS aims to promote the importance of a 'can do' approach in pupils, both individually and collectively. In a previous FS study (Murray & O'Brien, 2005), it was reported that FS was able to promote the importance of outdoor experiences outside the school environment, within the context of the family.

Few influences on behaviour can be more powerful than the support and approval of a group of friends or family. Carlton and Winsler (1998) assert that children who have secure relationships with their care-givers are more willing to explore the environment using the care-giver as a secure base. Parents that actively engage in their children's education often provide rich learning experiences at home. Feinstein, Duckworth and Sabates (2008) suggest that parental interest and involvement in school is deemed an important part of children's educational and cognitive development, showing positive links with achievement and adjustment. Desforges and Abouchaar (2003) support this assertion and also claim that during primary school age, the home learning environment and the nature of parental involvement can have a significant influence on children's achievement. Moreover, Feinstein et al. (2008) argue the greater the cognitive stimulation towards learning experiences at home, the greater the chance of providing a stimulating environment for children to enjoy their learning experiences, through engagement and placing value on each experience. FS has the potential to develop parental understanding of the importance of experiential learning which may help enhance appropriate 'hands-off' parenting.

Gill (2007) focuses on the period of time when children are between five and twelve, middle childhood. He writes "These crucial years...see many important changes in children's social and personal development" (p. 12). Gill suggests policy makers are more interested in either early years or early years settings or adolescence. However, for many, middle childhood is deemed an important stage in a child's development, see section

2.5.3, pages 42 to 46. Gill holds the view that today's society has become risk averse with "shrinking horizons of childhood" (Gill, 2007, p. 12), where children are actively taught to dissociate from nature due to adult fear. Chawla (1994) advocates educating parents about what can be gained from the natural world, "There is a great need to educate parents about this research...to awaken or inspire the parents' pleasure with natural play...as the necessary context for continued nature experiences for their children" (p. 23). It follows from the comments of Gill and Furedi that the development of a learning environment which is not uniform but in which children or young people can explore possibilities, develop activities and follow through ideas may help to bring balance to some of the more negative effects on childhood of the modern world.

2.4.2: Risk and safety

Risk, it could be argued, is a subjective phenomenon that is enmeshed in social and cultural forces. Within education research, Little (2006) notes that children's risk taking behaviour is rarely considered positive. This is a notion that is at odds with the Foundation Phase curriculum in Wales, which suggests children should take risks and become confident explorers of their environment, both indoors and outdoors (WAG, 2007). Gill (2007) advocates the benefits risk can have in children's play, but suggests that children are often denied these opportunities. He describes the development of 'risk aversion' and argues that society is now incapable of dealing with risks and has implemented unnecessary safety measures to avoid them, often at the expense of freedom and enjoyment. According to Gill (2007), public fear surrounding the issue of risk has increased rather than decreased. Furthermore, Lindon (1999) suggests that this increase in fear, especially amongst parents, seems logical given the media's propensity to sensationalise risks and focus on the dangers of the world.

Gill (2007) argues that practitioners who are preoccupied by fear of risk are restricting children's experiences and development. Elkind (2007) writes that play should not be made risk-free, "because we learn through experience and we learn through bad experiences. Through failure we learn how to cope" (p. 73). Gill proposes a 'philosophy of resilience' that seeks a balance between protecting children from genuine threats and providing rich, challenging opportunities through which to learn. There are many definitions of resilience in the literature. Dent and Cameron (2003) describe resilience as not just putting up with or coping with life's adversities, but bouncing back from negative experiences and major difficulties. Similarly, Luthar, Cicchetti and Becker (2000) define

resilience as “a dynamic process encompassing positive adaptation within the context of significant adversity” (p. 543). As this definition suggests, resilience can be a dynamic trait meaning that an individual may be resilient at some periods but not others. Secondly, the definition focuses on resilience being a positive adaptation to a stressful situation allowing an individual to build upon their levels of resilience. Thirdly, adversity must be significant whether this is minor in the form of a large class size or major as in family divorce.

The elements thought to explain resilience have been grouped into risk and protective factors that cushion or reduce risk (Rutter, 1993). Risk factors are life events that threaten or challenge healthy development such as neglect, separation/loss or experience of abuse. Protective factors are said to buffer the effects of adverse experience such as a valuing school, supportive teacher or caring family network (Dent & Cameron, 2003). Newman (2002) proposes that protective factors operate through one or more of four processes. These are: altering the child’s perceptions of or exposure to risk, reducing the chain reaction that occurs when risk factors compound and multiply, enhancing the child’s self-esteem and self-efficacy and by creating opportunities for change. FS may support school staff to develop children’s resilience through the range of experiences it seems able to provide. However, a thorough trawl through the literature and through relevant search engines did not find any research considering the relationship between FS and how it may affect the development of resilience.

When considering the outdoor environment, whilst risk and safety will undoubtedly be important issues for all adults working with children and young people, there is a need to recognise the positive outcomes, such as self-esteem and self-confidence that can be gained from engaging in risky activities. Stephenson (2003) argues that risk-taking and learning how to identify and deal with risk can be seen as part of children’s natural development, and thus an important life skill. The relationship between risk and the outdoors is interconnected, Greenfield (2004) highlights “the risks and challenges of being outdoors provide rich opportunities for learning, problem solving and developing social competence” (p. 1). Perhaps viewing the relationship in this way can encourage parents to gain a better understanding of risk as a way to develop resilience, something to aspire to rather than fear.

2.4.3: Age of technology

In modern society, the average child's bedroom could be viewed as a technological hub and safe haven. The outside world can be contacted through mobile phones, social media websites and computer games, giving children a virtual reality, as opposed to real life experiences. Nature is intrinsically and qualitatively different from anything else a child encounters in the man-made world, no matter how well simulated, technologically sophisticated, or virtual these manufactured representations may be. Through playing computer games, children acquire and augment their skills of imagination and memory. In relation to risk-taking, however, it takes place within a virtual world. A child's body, mind, imagination or ingenuity is not being tested against the realities of the physical materials and structures of the natural or human environment. The child remains in the play world. Does modern society provide sufficient quantity and quality of opportunities for children to experience the natural world? Pyle (2002) suggests that today's generation has witnessed greatly diminished and compromised possibilities for satisfying interaction between young people and nature. Compared to more ordinary outdoor environments, the persuasive appeal of such games seems tangible. Children appear to be departing from face-to-face interactions with people, places and the outdoor environment, which has characterised previous generations throughout human history. Malone (1981) implies that the goals, challenge and fantasy of computer games feed intrinsic motivation which increases a child's desire to continue playing. Computer games may encourage children to draw on skills such as exploring their environment and staying safe. Yet, these very skills and motivations, for some children, could be seen as becoming increasingly detached from their physical and social reality, something Louv describes as 'NDD'.

2.4.4: Nature Deficit-Disorder

"NDD describes the human costs of alienation from nature, among them: diminished use of the senses, attention difficulties and higher rates of physical and emotional illnesses" (Louv, 2005, p. 36). Louv (2005) asserts that within the last few decades, the way that modern children "understand and experience nature has changed radically" (Louv, 2005 p. 1). Whilst there would seem to be a great deal of truth in the above quote, NDD is not a recognised condition. It is the view of this study that the label is not helpful and one that may perhaps engender panic if conveyed to a wider audience. This appears to have been the case in the "Natural Childhood" document published recently by the National Trust (2012). It is described by its author, Stephen Moss as a "call to arms" (p. i) that presents "compelling evidence that we as a nation, especially our children, are exhibiting the

symptoms of a modern phenomena known as 'NDD'". It is the view of this study that this document holds incautious and biased views and could be deemed as scaremongering. The document misrepresents findings from other studies, which are not referenced appropriately and puts forward a very one sided perspective. The "compelling evidence" that Moss refers to appears to be based on statistics and newspaper articles based on opinion, as opposed to rigorous research. Even though the document does highlight genuine areas of concern for society, children and their experiences of nature, it does so in an almost vitriolic way that instils fear in the reader rather than instilling a sense of optimism about what initiatives such as FS are trying to create. Taking Gill's views into account, parents are already afraid about their children's safety and place in society. It can be seen then that the National Trust's document may feed into an almost scaremongering approach by communicating its message in an inappropriate manner at a time when parents and educators need ideas and initiatives that work. Scaremongering with regard to a socially constructed 'disorder' that has no medical underpinnings or foundation may not be the best approach to alleviate societies' fears.

2.4.5: Adults' views in relation to outdoor learning

Lovell et al. (2010) report that the most recent Public Opinion of Forestry (POF) survey (Economics and Statistics 2009) examined people's perceptions of using woods and forests for learning and education. They found that 82% agreed that woodlands are good places for children to learn about the outdoors. More widely, 48% of respondents agreed that woodlands provide places for learning, 91% agreed that woods are places where people can learn about the environment. This research, proposes that there is considerable support for education and learning outdoors amongst the general public, as well as amongst educators and participants.

The majority of the studies focusing on FS have tended to gain the perspectives of teachers, FS leaders and to an extent parents (Massey, 2005; Waite et al. 2006b; Griffiths et al. 2010). Where parents have been asked for their thoughts and opinions, questionnaires and interviews have been the main methods of data collection. Griffiths et al. (2010) reported that parents identified significant developments in their children as a result of participation in FS, spending more time outdoors and an increase in their knowledge of the environment. In the same study, parents also suggest that children talk about their experiences and what they have learned at FS. Parents reported this had a ripple effect within families. All parents involved in the study by Griffiths et al. (2010)

suggested they would recommend the initiative to other families, although some did suggest that the lines of communication between school and home could be improved. To supplement the perspectives of children, this study considered the views of a small group of parents, and sought to gain a parental understanding of FS and whether it is perceived as beneficial for their children. Also of interest was whether the ripple effect described in the research conducted by Griffiths et al. (2010) was consistent with parental perceptions in this study.

2.5: Learning and development

This section will look at psychological theory, such as experiential learning, that has underpinned much of the literature on outdoor experiences. Aspects of psychology associated with experiential learning shall be considered, as well as a range of psychological theories focusing on child development and the importance of the environment. How legislation in Wales and outdoor education can be used to support initiatives such as Forest School will also be considered.

2.5.1: Experiential learning theories

Experiential learning stresses the success of accomplishment in learning. Motivation is based on what a person sees as desirable learning goals and the method chosen to accomplish them. Lewin, Dembo, Festinger and Sears (1944) suggested four factors that lead to psychological success in a learning situation:

- a person is able to define his/her own goals;
- the goals are related to his/her central needs and values;
- he/she is able to define the paths that lead to the accomplishment of the goals;
- the goals represent a realistic level of aspiration for him/her – neither too high nor too low, but high enough to test his/her capabilities.

The majority of definitions of experiential learning focus on experience meaning action with psychomotor involvement or active physical engagement (Kolb, 1984; Kelly 1994). However, Cunningham (1983) suggests experiential learning could be learning from listening or reading a number of sources where ideas might need to be integrated or through vicarious learning (Steinaker & Bell, 1979). The definition of experiential learning that has been adopted by this study focuses on experience with active physical engagement. One theory has been widely referenced in the fields of education, professional development and in training since its conception, Kolb's cycle of experiential learning (1984).

Figure 1 – Kolb's experiential learning cycle ([Kolb, 1984 cited in Gair, 1997, p. 89](#)):

Formatted: Font color: Blue



Kolb's theory explains how learning through a particular experience takes place. The process of learning is conceived as a four-stage cycle (Figure 1). This study views the model as representing stages, depicting sequential steps in the process of experiential learning. A key feature of Kolb's cycle is that the process of learning is cyclical, so the learner moves from actor to observer creating a new form of experience on which to reflect at each cycle. The quality of reflection is crucial to ensure that the learner does progress in his / her learning. The cycle can be entered at any point, with the learner progressing through the stages until he/she completes the cycle. These implications then guide planning and subsequent implementation of experimental action to create new experiences. Immersion in immediate concrete experience is seen as the basis for observation and reflection. Observations are incorporated into an idea, image or theory from which implications for future action may be developed.

Kolb held the view that the cycle should be seen as an aspect of the holistic relationship between man and the environment, a process that has the capability to have much wider implications than simply learning. The cycle draws comparisons with the processes of problem solving, creativity and action research. Action is defined in the Kolb cycle as active experimentation that leads to new experience and the stage at which the cycle is ready to begin again. All of the aforementioned processes appear to be incorporated within the FS initiative approach to learning. It is for this reason that Kolb's experiential learning cycle has been chosen over other theories of experiential learning.

Kolb draws comparisons with Piaget's sequence of developmental stages (Piaget, 1971), which culminates in the flexible interaction between different forms of knowing that are linked by appropriate forms of learning, the formal operation stage. Both assimilation and accommodation underpin the Piagetian stages of development and Kolb's experiential learning cycle. Assimilating information from the environment and accommodating what is already known by the learner in light of the new learning are essential processes for cognitive development. The FS initiative seems to offer ways in which these processes can occur through direct experience as opposed to indirect or vicarious methods of learning. Piaget's theory will be considered in more detail on pages 47-49.

However, some writers disagree with Kolb's theory. Rogers (1996), for example, points out that "learning includes goals, purposes, intentions, choice and decision-making, and it is not at all clear where these elements fit into the learning cycle" (p. 108). Wallace (1996) also suggests that, in taking action, individuals employ knowledge which is primarily tacit and intuitive. Wallace elaborates by suggesting that most action is routine but, when confronted with problems, individuals respond in one of two ways. They may either step back and reflect on their action or reflect in action. Question marks still remain over ill-defined terms as well as lack of clarity about whether the cycle of experiential learning focuses on the guidance and teaching process or the learning process. Also, the role of reflection in experiential learning does not seem clear due to the confusion about its interpretation.

Critics argue that Kolb's experiential learning cycle can be viewed as too simplistic and while simplicity is to be valued, it can also mislead. Moon (2004) argues that what the Kolb

cycle tries to achieve on one level is to 'tidy up' a process that appears to be far from a neat sequence of discrete stages. However, perhaps learning, and the role of reflection in learning, may not appear to be as tidy as Kolb's experiential learning cycle suggests. For example, the model of unconscious incompetence through to unconscious competence and reflective practitioner, suggests that reflective learning can influence learning at any point in the process of skills development and tacit learning (Business balls, 2012). In spite of the aforementioned criticisms, Kolb's experiential learning cycle forms a key theory for this particular study due to the previously mentioned links with problem solving, creativity and action research, all of which could be associated with FS approach.

Another framework, compatible with the theory of experiential learning, is Schon's notion of the reflective practitioner (1983, 1987). Schon describes how individuals display competence in the uncertain, unique complex situations of practice, yet the awareness of how tasks are performed skilfully is limited. It could be argued that this view is linked to action theory, as the behaviour has become habitual and automatic. Also, the notion of self-awareness links directly with reflection, a key component in the experiential learning cycle (Schon, 1983, 1987), for an individual to become self-aware involves a certain amount of reflexive thinking. Activities that are likely to make individuals think and reflect about their experiences are likely to affect their sense of self. Therefore, FS has the potential to offer children regular opportunities to achieve and develop confidence through hands-on learning in a woodland environment. This approach demonstrates links with experiential learning theories. The Von Restorff effect (1933) could be apparent through experiential learning. The Von Restorff effect refers to the fact that people tend to learn things when they are presented in a novel and different way. This difference could lead to experiential learning experiences being perceived as more enjoyable and fun. However, a reverse effect could also be applied in that the actual learning experience is remembered vividly, but in doing so other information is not considered, producing an effect where less is remembered overall.

Johnson and Johnson (2003) describe action theory as "deciding what actions are needed to achieve a desired consequence in a given situation" (p. 48). If, in a given situation, a person does y, then z will be the outcome. For example, if a person smiles at someone and says "good morning" he/she may expect a reciprocal greeting in return. When a pattern of behaviour is learned that is effective in a given situation, that behaviour will be

repeated until it becomes habitual and automatic. Johnson and Johnson (2003) state that it is at this stage that action theories become tacit. The development of action theories are ongoing processes in how people learn to anticipate what the consequences of certain actions may be, try these actions out and experience them, and then reflect on whether the action theory is suitable or requires adjusting. "Experiential learning is a procedure based on the systematic development and modification of action theories" (p. 49). Therefore, experiential learning is an active, rather than a passive, form of learning.

When people are involved in experiential learning, pro-social behaviours such as sharing, helping and co-operating are essential as they provide the foundation for crucial academic processes, such as problem solving and academic motivation (Wentzel & Watkins, 2002). Johnson and Johnson (2003) assert that the more individuals care about each other, the harder they will work to achieve mutual goals. These joint efforts can promote higher self-esteem, self-efficacy, personal control and confidence in an individual's competencies. Experiential learning methods could also be viewed as having benefits for learning in relation to interpersonal skills. Individuals must first be taught the interpersonal skills required to work in a small group context and experiential learning can motivate children to use these skills. Increased social skills can promote achievement but also contribute to building more positive relationships with peers. Putnam, Rynders, Johnson and Johnson (1989) were able to show that, when children were taught social skills, observed by the class teacher and given feedback individually on how often they engaged in the skills, the children's relationships became more positive. However, it is noted that participants were classed as having SEN.

Seligman (2002) argues that positive emotions broaden attention which allows a person to become more aware of their wider physical and social environment. Isen (2000) believes this broadened attention can result in being open to new ideas and to being more careful than usual. As a result, positive emotions offer opportunities to create better relationships and show greater productivity. Negative emotions can narrow attention and, from an evolutionary perspective, engender a fight or flight response. Carr (2004) asserts that negative emotions can facilitate highly focused, defensive critical thinking and decision making, whereas positive emotions facilitate creative, tolerant thinking and productivity. In addition, Fredrickson's (1998) "broaden-and-build" theory of positive emotions has meant increasing attention has been devoted to revealing the role of positive emotions in

adaptive functioning. According to this theory, positive emotions do not just reflect momentary happiness or satisfaction, but more importantly serve the evolutionary adaptive function of widening a person's scope of attention and cognition as well as expanding the range of possible behaviours. The broadened mindset associated with positive emotions facilitates creative and flexible thinking, as well as effective problem solving and coping skills. Claxton and Carr (2004) argue that positive learning responses may develop into other contexts. The authors maintain that a child, who has developed a quality such as persistence in one task, may be able to recognise that he/she is able to deploy the same quality in another unrelated task. Over time, the benefits associated with the broadened mindset compound and build durable psychological and social resources that the person can draw on to deal with various life challenges.

2.5.2: Theories relating to child development

Given a major focus of this review is the FS initiative, consideration is given to theories that specifically focused on the natural environment's role in the physical and cognitive development of children.

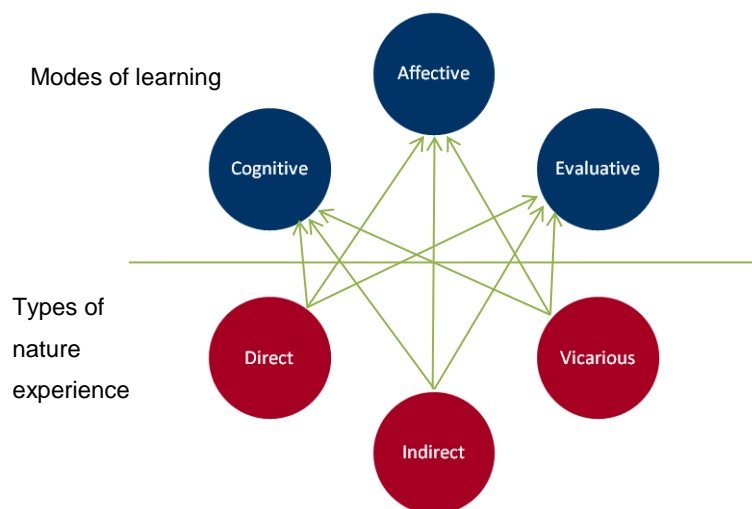
Kellert (2002) examines the importance of childhood contact with nature by describing a conceptual framework that focuses on affective, cognitive, and evaluative development amongst children in middle childhood and early adolescence. However, Kellert himself suggests caution in accepting the conclusions he draws due to the paucity of systematic and rigorous research when exploring children's experiences with nature. He also cites the need for future scientific study to test his conceptual framework. This study has chosen to focus on Kellert's conceptual framework for a number of reasons. Firstly, links can be drawn with more robust psychological theory such as Kolb (1984), Piaget (1971) and Vygotsky (1973) and these shall be considered in this section. Secondly, Kellert stresses the importance of middle childhood within this framework, a view also shared and corroborated by other researchers (Sobel, 1993; Erikson, 1963; Pyle, 1993). Thirdly, as this study is exploratory in nature and due to the lack of research available linking children and nature, attempting to apply Kellert's framework within the context of FS could help to test the framework's validity.

Kellert asserts that children and young people's experience of nature can be classified in three ways; direct, indirect and vicarious or symbolic experience (Kellert, 1996). Direct experience is characterised by being largely unplanned and in a natural environment and

is a central theme of Kolb's experiential learning theory (1984). Indirect experience of nature involves actual physical contact, but is closely managed by adult intervention. Vygotsky's theory of the Zone of Proximal Development (1978) and Bruner's scaffolding (1978) discusses the importance of adult-initiated modelling, sharing parallels with Kellert's framework (2002). Finally, vicarious or symbolic experience takes place when actual physical contact with nature is not first hand, for example, through television, books or the internet (section 2.4.3, p. 30). It could be argued that this is becoming a dominant mode for many children to experience nature.

Kellert links these three levels of experience to three modes of learning in childhood development; cognitive, affective maturation and evaluative development. Kellert defines cognitive or intellectual development as emphasising the formation of thinking and problem solving skills; affective maturation as focusing on the emergence of emotional and feeling capacities; and evaluative development as stressing the creation of values, beliefs and moral perspectives. Kellert links the types of experience of nature to the modes of learning in childhood development (Figure 2). Each mode of learning shall be briefly considered on pages 38-41.

Figure 2 – Types of nature experiences and modes of learning in childhood development (Kellert, 2002, p. 121)



Cognitive development

Kellert uses Bloom, Engelhart, Furst, Hill and Krathwohl's (1956) taxonomy of cognition to explore the potential impact of a variety of forms of experience of nature on children's cognitive development. Bloom's taxonomy identifies six stages of cognitive maturation; knowledge, comprehension, application, analysis, synthesis and evaluation. Kellert asserts that there is evidence to suggest that experiential contact with nature can exert a significant impact on cognitive development (Bixler, Floyd & Hammet, 2002), especially during middle childhood, between the ages of six and twelve and early adolescence. This raises questions about why some outdoor learning initiatives, seemingly like FS, are predominantly targeted at children aged between three and seven and not extended into middle childhood during KS2. Hoyt & Acredolo (1992) show that environmental attitudes, preferences for nature and the development of pastoral values are strongly influenced by children's experience in natural settings. As will be discussed later in section 2.5.3, p. 42, Sobel also argues that middle childhood should be a period of exploration. The psychological value of aimless exploration, especially in natural settings, may be more important than many realise. It is claimed to be associated with stress reduction (Ulrich, 1993) and self-esteem (White & Heerwagen, 1998). Claxton (1997) asserts that sitting quietly and pondering a situation can enhance creative thought. Claxton cites Martindale (1997) to highlight that creativity is associated with a state of low-focus neural activity. Martindale reported that during his studies, when a person was aroused his / her brainwaves were of a higher frequency. Yet, when a person was relaxed his / her brainwaves were slower and more synchronised. His results suggest that the more relaxed a person is, the greater their level of creativity.

Claxton states that being given time to think and reflect is a luxury that today's society has come to ignore and undervalue. Active thinking has perhaps superseded the need to stop and allow individuals the chance to contemplate and daydream due to society's preoccupation with the concept of time. Certainly within the education system and school day, time, or the lack of time, would appear to be a significant factor. Further research would be needed exploring whether initiatives such as FS could be vehicles to increase creative thinking by encouraging those who participate to stop, ponder and allow minds to drift in thought within an outdoor environment.

Taking Claxton's perspective into account, it could be argued that the theory of mindfulness (Kabat-Zinn, 2005) has an important part to play in allowing children to develop awareness of their mind and body and living in the here and now. Perhaps allowing children the opportunity to experience the simple and direct practice of moment to moment observation of the mind and body process through calm and focused awareness without judgement could enhance their development. It remains to be seen whether the principles of mindfulness could be adopted within outdoor initiatives such as FS.

Affective development

Following on from the cognitive taxonomy, Krathwohl, Bloom and Masia (1964) devised a taxonomy of affective maturation, which identified five stages of emotional development; receiving, responding, valuing, organising and characterisation. Kellert sees affective development as largely focusing on children's feelings and emotions. As has been highlighted (section 2.2.3., p. 13), FS research claims espoused benefits for children's emotional well-being and could link effectively with affective development. Pretty et al. (2009) claim that open green space and access to nature are both important for children (Kaplan & Kaplan, 1989; Kahn & Kellert, 2002; Thomas & Thompson, 2004; Louv, 2005); with the quality of their environmental exposure inextricably linked to their wellbeing (Thomas & Thompson, 2004).

Evaluative (values related) development

Kellert describes values as a distinct synthesis of affective and cognitive perceptions and understandings, the nine values are listed in Table 1 (p. 41). He suggested that there are nine values of nature, which differentially emerge at varying ages or stages of development. Kellert draws on his previous research (Kellert, 1996) to propose a typology of basic values of the natural world, collectively labelled as biophilia (Kellert & Wilson, 1993; Kellert, 1997). Biophilia refers to the primal urge that connects human beings with the natural world, implying that humans have an innate need for nature. Kellert believes the content and intensity of the values varies greatly in individuals and groups. Kellert also asserts that contact with the natural environment occupies a surprisingly important place in a child's emotional responsiveness and receptivity. This would place initiatives like FS in a favourable position to enhance children's development.

Table 1 – A typology of values of nature (Kellert, 2002, p. 130)

Value	Definition
Aesthetic	Physical attraction and appeal of nature
Dominionistic	Mastery and control of nature
Humanistic	Emotional bonding with nature
Moralistic	Ethical and spiritual relation to nature
Naturalistic	Exploration and discovery of nature
Negativistic	Fear and aversion of nature
Scientific	Knowledge and understanding of nature
Symbolic	Nature as a source of language and imagination
Utilitarian	Nature as a source of material and physical reward

Kellert proposes that developmental progression has four characteristics. First the formation of values of nature moves from relatively concrete and direct perceptions and responses to the more abstract levels of experience and thinking. Next, the values generally shift from highly personal, egocentric, and self-centered concerns to the interests of others and to social interests. The geographic focus of the values leans from local and parochial settings to more regional and then global outlooks, which is in keeping with Sobel (1993). Finally, emotional and affective values of nature emerge earlier than the more abstract, rational and logic-deduced perceptions (Kellert, 2002).

Kellert (2002) suggests that between three and six years of age, children develop the utilitarian, dominionistic, and negativistic values of nature. The second developmental stage is middle childhood, between the ages of six and twelve approximately. "Middle childhood is a time when the humanistic, symbolic, aesthetic, and knowledge components of the scientific value develop most rapidly", while the values of the first stage diminish in significance (Kellert, 2002, p. 132).

Piaget (1971), Kellert (2002) and Sobel (1993) concur that children during middle childhood can learn most effectively from concrete, connective, nature-based, and imaginatively presented experiences. They also strongly state that it is only after the ages of eleven and twelve that a child can begin to reason and conceptualize, only then can a child grasp abstract ideas and lessons. Kellert (2002) believes that the ability to reason abstractly is based on the development of humanistic, symbolic, aesthetic and scientific

nature values during the middle childhood phase. However, if a child does not have the opportunities to engage with nature fully, it is not clear that his or her development will be affected negatively? Kellert's perspective may reflect his own vested interest in the potential effect of nature on children and therefore, it is possible to suggest that his proposed framework is open to potential bias and due to the lack of further investigation also open to criticism. This gives a rationalisation as to why this study has chosen to highlight his research, to see if the theory can be applied, in this case through experiences of FS.

It is important to consider whether possible increases in indirect and vicarious experiences of nature can compensate for less direct encounters with the natural world. More children than ever have unprecedented access to nature through technology such as television, film, video, computers and the Internet. As a consequence, children seem to be experiencing far greater exposure to natural settings and wildlife than previous generations via technology. However, the impact of these indirect and vicarious experiences of nature is questionable, especially when they occur in a context of greatly diminished and declining direct contact. Pyle argues that encounters with nature through technological media can never provide the challenge, immersion, intimacy, discovery, creativity, adventure and surprise that can be afforded through direct experience. "Direct, personal contact with other living things affects us in vital ways that vicarious experience can never replace" (Pyle, 1993, p. 146). This study has been unable to locate research that suggests indirect, vicarious experiences of nature have a negative impact on the long-term development of children. This type of longitudinal research could be explored more closely in the future, given the continuing advances in technology. As much as Kellert (2002) and Pyle (1993) stress the importance of direct experience, an argument could be made for a mix of direct, indirect and vicarious experiences as the best solution, as they have the potential to give children more rounded opportunities.

2.5.3: Importance of middle childhood

It could be argued that the vast majority of psychological theories relating to cognitive development recognise that children at KS2 (middle childhood) have the capacity to be avid learners who can actively build on the knowledge they have already accumulated. Indeed, during middle childhood, advances in children's brain development continue. Neurological maturation allows faster, more automatic reactions (Johnson, Grossmann & Kadosh, 2009), whilst selective attention enables focused concentration in school and in

play (Rueda, Rothbart, Saccomanno & Posner, 2007). Information processing theory highlights the many components of thinking that advance during middle childhood. For example, although sensory and long-term memory do not change a great deal during these years, the speed and efficiency of working memory can improve dramatically (Cowan & Alloway, 2009), allowing children in middle childhood to be better thinkers as well as more strategic learners than previously. Advances in metacognition and control processes support children to direct their minds toward whatever they wish to learn (Bjorkland, Dukes & Brown, 2009).

Interestingly a concomitant of the increasing ability to direct one's mind requires a greater awareness of oneself in relation to both the physical and social world. This leads to changes and increases in children's self-understanding and social awareness, with accompanying challenges. For example self-consciousness and associated self-criticism rises from ages six to eleven and "by middle childhood this previous overestimate of their ability or judgements decreases" (Davis-Kean, Jager & Collins, 2009, p. 184). It is asserted by Davis-Kean et al. that this enhanced self-criticism and social awareness also leads to increased vulnerability towards self-esteem and a resultant drop in self-esteem for many children because children's self-concept becomes increasingly vulnerable to the opinions of others, partly because children think in a concrete manner during middle childhood. This is in keeping with Kellert's theory (2002) claiming that the previously mentioned components of scientific value in middle childhood, ages six to twelve, is a time when the scientific, humanistic, symbolic and aesthetic develop most rapidly while utilitarian, negativistic and dominionistic diminish in importance (Table 1, p. 41). Huston and Ripke (2006) state "Experiences in middle childhood can sustain, magnify, or reverse the advantages or disadvantages that children acquire in the preschool years" (p. 2). Current thinking about resilience suggests that although some children cope better than others, none are impervious to their past, history or current context (Jenson & Fraser, 2006).

Kellert (2002) further asserts that at the age of middle childhood, children become more comfortable, familiar and appreciative of other creatures and natural settings. Shepard (1996) believes it is at this age that children are more able to recognise the 'different-ness and other-ness' of the natural world, cultivating greater affection and curiosity for other creatures and environments. Kellert (2002) concurs with this viewpoint in his belief that

children emerge more aware of the independent rights of other life and begin to develop feelings of responsibility for care and considerate treatment of nature.

Erikson (1968) suggested that middle childhood marks the time when children are particularly interested in making things, in exhibiting industry and competence, and in establishing a self that is separate and distinct from the continuous care and control of adults. Kellert (2002) suggests that children are more likely to venture into non-familiar natural settings, expanding their knowledge, sense of competence and capacity to cope in areas independent of adult supervision. Most importantly, Kellert (2002) feels this is a time of greatly expanded interest, curiosity and capacity for children in assimilating knowledge and understanding of the natural world. He argues that during this period, rapid cognitive and intellectual growth can occur, including many critical thinking and problem solving skills achieved through interaction and coping in a natural environment. However, it could also be argued that these changes occur in many environments and not simply when a child is in direct contact with nature.

Erikson proposed eight psychosocial stages of development, including trust versus mistrust and initiative versus guilt, each of which is represented by psychological tasks or 'dilemmas'. Erikson believed that, if these proposed tasks were resolved, a particular strength of virtue evolved. However, if the task was unresolved, a personal difficulty or vulnerability is created. The fourth psychosocial crisis Erikson proposes is industry versus inferiority. Erikson noted that middle childhood is a time when the child "must forget past hopes and wishes, while his exuberant imagination is tamed and harnessed into the laws of impersonal things," becoming "ready to apply himself to given skills and tasks" (Erikson, 1963, pp. 258-259). A criticism of Erikson's theory is that it is based primarily on work done with boys and men and that some of Erikson's "crises" can only be attributed to men. Also, some feel that Erikson's theory pays more attention to infancy and childhood than adult life and therefore has dubious claims to suggest it is a life span theory. However, taking Erikson's notion into account, FS may be able to provide opportunities for children to resolve the tasks described by Erikson and, through an experiential learning approach, overcome tasks that may at first prove challenging and also develop crucial key skills.

Sobel (1993, 1996) studied the stages of child consciousness development through children's mapmaking and interactions with nature. He found patterns of development

through analyzing the maps, and interacting with the mapmakers. He also found that early childhood (between four and seven) was characterized “by a lack of differentiation between self and the other” (Sobel, 1996, p. 13). From ages seven to eleven, Sobel reported that children have a strong desire to explore and to wander beyond that which is familiar (Sobel, 1996, p. 19). Only after the ages of eleven or twelve do children want to engage in solving community issues and understand the implications of global issues (Sobel, 1996, p. 27). Sobel (1996) asserts that trying to impart knowledge and responsibility before children have been allowed to develop a loving relationship with the earth is incorrect. Kellert (2002) believes that children’s emotional and affective values of nature develop earlier than their abstract, logical and rational perspectives, it must be stated that this is not justified in his research.

Sobel believes in engaging children and young people more deeply in knowing the flora, fauna and character of their own local surroundings. He suggests “what’s important is that children have an opportunity to bond with the natural world, to learn to love it...” (p. 10). Furthermore, Palmer’s (1998) research proposes that a sense of care for the environment can be conditioned in childhood through prolonged, repeated interaction with the natural world. However, a criticism of Sobel’s framework is that it appears to be focused on an ideological, ecological context that would be difficult to embed into an existing national curriculum. However, Pretty et al. (2009) have more recently appeared to base much of their proposed framework on the three stages that Sobel has described. Pretty et al. (2009) propose that one way of increasing children’s contact with nature is within the formalized educational system, both in terms of the amount of exposure to nature in the learning environment and learning about nature. Both of these notions could be attributed to FS through the types of activity and opportunities provided.

Sobel (1993) and Pretty et al. (2009) describe a place-based curriculum that should be considered flexibly but that each stage should have a different tenor and style. They define a place-based curriculum as being centred around the natural world that surrounds a community. Both frameworks begin with ages four to seven that fosters empathy for the familiar. This then moves out toward exploration of the home and surrounding area between ages eight to eleven. Finally, between ages twelve and fifteen, social action and re-inhabitation of familiar places within their community should take place.

Sobel stresses that if human beings are to change environmental worldwide concerns, they must first start with developing an affiliation for the natural world closest to them. Indeed, when using the perspective of mindfulness, Thich Nhat Hanh (2003) writes “Every mindful step we make and every mindful breath we take will establish peace in the present moment and prevent war in the future. If we transform our individual consciousness, we begin the process of changing the collective consciousness” (2003, p. 56). With this thought in mind, it follows that if an individual is to be expected to develop care for the world it may be most appropriate for the individual to begin with developing care for and understanding of his or her immediate environment. It would be beneficial for research to take place examining the importance of early experiences of nature on children and whether these experiences can engender a greater affinity with nature and subsequently more complex global issues.

Sobel’s discourse also shares parallels with Bronfenbrenner’s ecological systems approach (1977). Bronfenbrenner believed that children must be studied not only in the home but also in schools, neighbourhoods and communities where development takes place. Bronfenbrenner proposed four contextual structures within which individuals and places are located – microsystems, mesosystems, exosystems and macrosystems. The four levels that Bronfenbrenner proposes interact dynamically with the premise that children actively shape the nature of their social contexts. Bronfenbrenner’s systems theory underpins the many levels of a child’s surroundings that influence development.

Sobel states that “Middle childhood is a critical period in the development of the self and in the individual’s relationship to the natural world. The sense of wonder of early childhood gets transmuted in the middle childhood to a sense of exploration” (p. 159). It could be argued that each of Sobel’s stages may be viewed as important as the other, similar to Piaget’s stages of development. The research highlighted in this review suggests that the period of middle childhood is extremely important for children’s holistic development and having initiatives such as FS could help to further children’s opportunities to explore, to assimilate and accommodate new experiences and learning. As Stegner (1962) describes, at this age, experiences that provide the potential for exploration, discovery and adventure can become deeply etched in a child’s mind:

There is a time somewhere between five and twelve...when an impression lasting only a few seconds may be imprinted...for life...Expose a child to a particular environment at his susceptible time and he will perceive in the shapes of the environment until he dies. (p. 21).

Waite, Davis and Brown (2006b) briefly highlight a whole school approach that focuses on developing the school grounds. More recently, Lamb (2011) outlines a whole school approach to FS, with children aged four to nine across the Foundation Stage and KS2 curriculum. Perceived benefits in children's learning and development have been suggested by Lamb, but there is no discernible evidence to substantiate these claims.

2.5.4: Developmental psychology theories

A number of developmental psychological theories have been used to guide and interpret research and practice with children and young people. These theories have played a key role in underpinning much of the government legislation relating to how children are educated. However, it is important to note that this review makes a key distinction between 'the' natural environment, namely trees, plants and nature and 'a' natural environment in which learning takes place such as a classroom, home, outdoors. Piaget's cognitive developmental theory (1954) focuses on the child's construction of schemes or patterns of thought and how these patterns affect development through a series of qualitatively different stages. Piaget identified fixed linear stages of innate development, from concrete to abstract thinking, which contributed significantly to modernist perspectives of child development. The Plowden Report (Central Advisory Council for Education, 1967) recommended that primary education in the UK should move from being teacher-led, to being child-centred, using Piaget's perspective of learning as a rationale.

This study has considered the importance of this early work in the area of child development and recognises that Piaget's proposed concrete operational stage takes place between six and eleven years of age. During this stage, Piaget states that children understand and apply logical operations or principles to interpret experiences objectively and rationally. Piaget believed that children operating within the sensory motor, preoperational, and concrete operational stages are dependent upon concrete interactions with the world in order to promote intellectual growth and true learning. Piaget concluded that the child's "development of an accurate representation of physical reality depends on the gradual coordination of schemes of looking, listening, and touching" (Bransford, Brown

& Cocking, 2000, p. 80). However, Piaget has been widely criticised for trying to apply overly rigid age ranges to his proposed stages of emotional, cognitive and moral development (Berger, 1988). It is important to remember that children vary greatly in the pace and nature of their development. Moreover, criticisms of Piaget's research and theory highlight the failure to explore alternative explanations and not distinguish between competence and performance. Also of note is the criticism that there is no sudden shift between pre-operational and concrete operational logic and that children have the ability to classify information long before middle childhood (Halford & Andrews, 2006). Nonetheless, Piaget's experiments revealed that school-age children can use mental categories and subcategories more flexibly, inductively and simultaneously than younger children can (Meadows, 2006). Therefore, it can be argued that children in middle childhood can be more advanced thinkers, intellectually capable in ways that younger children are not. This makes this particular age group extremely important for educational research.

Piaget discusses the importance of cognitive equilibrium, a state of mental balance that individuals strive for. However, achieving equilibrium is often problematic and sometimes a new experience or question can appear incomprehensible. It is during this period of imbalance and confusion that individuals can develop cognitively, cognitive adaptation. As mentioned previously, Piaget describes two types of cognitive adaption; assimilation, where new experiences are reinterpreted to fit into or assimilate with old ideas and accommodation, where old ideas are restructured to include or accommodate new experiences. Accommodation is more difficult to achieve than assimilation but does allow for cognitive growth. In relation to FS, this type of cognitive adaptation would seem to fit in well with the principles of FS, where experiences can be built on over time (O'Brien & Murray, 2007). Children are given opportunities to assimilate and accommodate their learning through a wide range of experiences. Piaget's theory provides his perspective with regard to how a natural environment, for example a classroom or home can have a positive influence on a child's cognitive development. However, this review has been unable to locate within Piaget's research reference to the possible impact the natural environment may have on children.

Social constructivists including Vygotsky (1978) and Bruner (1996) agreed with Piaget (1954) that development occurs in stages. However, they suggested that, rather than innate development, it is the social and cultural context in which a child is placed that has

the strongest influence on development. Vygotsky believed that education occurs everywhere, not just in school and emphasised the sociocultural importance of children's cognition. Unlike Piaget, Vygotsky regarded instruction as crucial, both Vygotsky and Bruner emphasised the role of the adult to co-construct learning and development through mediation and scaffolding. According to Vygotsky, "What children can do with the assistance of others might be in some sense even more indicative of their mental development than what they can do alone" (1987, p. 5). Development is seen as a dynamic process involving reciprocal exchanges. People and settings transform the child who, in turn, affects the people and settings around the child, which further reshape the child in an endless process. Johnson and Johnson (2003) suggest "the challenge in teaching is not covering the material for the students, it is uncovering the material with the students" (p. 492). What is noticeable across all these discourses and theorists is that they believe a natural environment can influence individuals. However, it would seem that more research is needed to explore the influence of the natural environment on individuals.

Howard Gardner (1983) contributed a post-modern perspective, which viewed intelligence as flexible and culturally dependent in definition. He theorised that there are multiple intelligences which contribute to the development and full expression of human potential. Later, Gardener added a further 'naturalistic intelligence' in recognition of observational evidence that indicated some children's ability to demonstrate high levels of ecological literacy (Gardener, 2000).

Gardner's multiple intelligences, in particular kinaesthetic and naturalistic intelligences, are often referred to by practitioners to explain why they believe the outdoor environment is beneficial for those experiencing difficulty learning in a mainstream classroom. It could be argued that these theories relating to child development have greatly influenced the construction and development of the aged three to seven curriculum in the UK, with the implementation of the Foundation Phase in Wales and the Foundation Stage in England. However, these legislative documents appear to take a utilitarian position as a context for learning, and perhaps fail to recognise the value of a positive relationship with place and nature. Links can be drawn between these developmental theories and the FS initiative, which perhaps can recognise the context of learning, together with the value of building and fostering positive relationships for children and nature.

2.5.5: Legislation in Wales and outdoor education

In September 2008, the Foundation Phase for Welsh schools was created for children aged 3 to 7 (WAG, 2008a); with a view to being implemented over the following four years. The Foundation Phase has a focus on experiential learning and active involvement, where the emphasis on the use of the outdoors is made explicit. Teachers through the Foundation Phase became more aware of the need to develop children's self-confidence, independence and co-operation with their peers. Alongside these elements there was a need to be mindful of fostering and developing children's positive outlook to learning such as resilience and curiosity. Siraj-Blatchford and Sylva (2004) suggested that these elements could be supported by the inclusion of child-initiated activity. Moreover, opportunities could be provided for children through practical, experiential learning and real-life problem solving by engaging children in sustained shared thinking, where meaning is jointly constructed through dialogue between adult and child, and through asking open questions (WAG, 2004, 2007). This approach requires sensitivity and skill and owes much to Vygotsky's theories of mediation and scaffolded learning (1978).

The Foundation Phase Framework for Children's Learning for three to seven year olds emphasises the value of the environment in learning "Indoor and outdoor environments that are fun, exciting, stimulating and safe promote children's development and natural curiosity to explore and learn through first-hand experiences. The Foundation Phase environment should promote discovery and independence and a greater emphasis on using the outdoor environment as a resource for children's learning". (WAG, 2008, p. 4) The Foundation Phase places a great deal of emphasis on learning by doing, covered previously in this review, by focusing on experiential learning theory. Young children are provided with opportunities to gain first hand experiences through play and active involvement rather than completing exercises in books or on computers. Many links can be drawn between FS and the Foundation Phase curriculum in Wales. Strands such as creative development, physical development, personal and social development, wellbeing and language, literacy and communication skills can be met through the FS initiative. A worked example of how these strands like to the FS experience can be found within the study carried out by Griffiths, Elniff-Larsen & Jones (2010, p. 13).

Provision of both outdoor and indoor experiences could be simultaneous and balanced with the support of adults. The rationale behind the Foundation Phase was that it would

bring greater consistency and continuity to children's education at such an important period in their development. Children could make decisions for themselves about where they wanted to carry out their activities. There is recognition that the outdoor environment can offer experiences, risks and challenges that are essential to early learning and development (Rickinson et al. 2004; Lovell et al. 2010). O'Donnell et al. (2006) investigated the perceptions of head teachers in relation to education outside the classroom. Overall, perceptions were positive, with head teachers viewing such opportunities to be an "integral part of the learning and development of pupils in their school" (p. 34). The majority of head teachers, more than 92%, agreed education outside the classroom, in both natural and man-made environments, had a positive impact on:

- broadening pupils' experiences;
- the school ethos;
- pupils' attitudes and values;
- pupils' behaviour and motivation;
- pupils' communication and social skills.

In 2008, WAG published the document 'Making the most of learning: Implementing the revised curriculum' (WAG, 2008b). This document reflects the UNCRC, (UNICEF, 1989) and Children and Young People: Rights to Action document (WAG, 2006) which have been discussed in section 2.3.1, pages 21 to 22. Some aims of the curriculum "focus on the learner; focus on continuity and progression 3 to 19; ensuring that appropriate skills development is woven throughout the curriculum and offering reduced subject content with an increased focus on skills" (p. 3). The document cites the 'Skills framework for 3 to 19 year olds in Wales' (WAG, 2008c), created to help schools plan the development of transferable generic skills for learners from 3 to 19 and underpin the revised curriculum. The document also states "In all phases, a whole-school approach is crucial so that there is a shared and coherent vision across the school" (p. 10). This places ever increasing demands on schools and teachers to deliver a curriculum that is appropriate, relevant and provides motivating experiences for all learners. The potential benefits of outdoor learning, using initiatives such as FS as an approach, may help to deliver a more skills based curriculum in Wales that supports children's learning and development.

2.6: Summary of the rationale for the current study

The focus of the current study was identified due to the lack of children's voice relating to the FS initiative. Despite the assertion by Lovell et al. (2010) that FS is probably the most widely documented and researched education and learning initiative taking place in woods and forests, it has only been running for just over ten years. The research to date is confined to evaluations, case studies and anecdotal evidence from a largely adult perspective (Murray & O'Brien, 2006; Jenner & Hughes, 2006). Waite, Davis & Brown (2006a) cite a lack of pupil voice in a proposed system of self-evaluation of FS. However, this review highlights the lack of pupil voice about the FS initiative as a whole. Waite, Davis and Brown also suggest that when examining research on FS, a limited number of children's comments appear to be filtered through several layers of adult interpretation. There would appear to be little research carried out specifically looking at children's perceptions. Given the importance placed on the voice of the child in legislation such as UNCRC (UNICEF, 1989), The Children Act (DoH, 1989) and Children and Young People: Rights to Action (WAG, 2006), it would seem there is a noticeable gap in the research literature.

Alongside children's perceptions, it was deemed appropriate to explore the perception of parents with regard to FS. Griffiths et al. (2010) reported that parents identified significant developments in their children as a result of participation in FS, and that children talk about their experiences and what they have learned at FS. Parents also reported this had a ripple effect within families. This study explored whether these findings would occur. Murray and O'Brien, (2005) suggest that FS contributes to a number of psychological benefits for children and young people. However, the FS initiative appears to be implemented, and perceived to be most effective, in the Foundation Phase / Stage with only two reported examples of primary school participation at a whole school level (Waite, Davis & Brown, 2006b; Lamb, 2011). This aims of this study were to explore the perceptions of children and parents in a primary school where the initiative had been implemented at a whole school level.

2.6.1: Research Questions

Q1. What are children's perceptions of the Forest School initiative?

Q2. What are parents' perceptions of the Forest School initiative?

Q3. What potential influence can Forest School have on children's learning and development

Chapter 3 – Design

3.1: Introduction

In this section, the research paradigm adopted for this study will be outlined, with justification made for the choice. A full account of the paradigm will be provided, giving consideration to the strengths and weaknesses of qualitative research. Following this, the procedure will be illustrated and the data collection method will be described. The rationale behind the data collection method and the construction of the interview questions will also be outlined. Information stating how the interview questions were piloted will also be given. Justification will then be provided for the selection of thematic analysis as the chosen method for analysing data. To conclude this section, the ethical considerations will be highlighted.

3.2: Research paradigm

In any research, quantitative or qualitative, a choice of method should not be predetermined. There are no right or wrong methods, but the method chosen should be the most appropriate for what is being asked and investigated. As this study has positioned itself to explore the perceptions and experiences of individual children and their parents, it was decided that a qualitative research paradigm would be most appropriate to encapsulate those perceptions and experiences, as qualitative research enables the voice of the child and parents to be heard. This study has sought to fill a noticeable gap in the research involving the FS initiative, namely obtaining the thoughts, perceptions and experiences of children and parents, using a qualitative approach that employs formal methods.

3.2.1: Qualitative methods

Qualitative research tends to focus on meaning. Research studies have reported how people make sense of the world and how they experience events. Gaining an understanding of a particular condition and exploring what it is like to experience and how it is experienced can be captured in a qualitative study. Qualitative research concerns itself with the quality and richness of the experience, rather than an identification of cause and effect relationships. A qualitative methodology best fits this study as it seeks to explore, describe and tentatively explain the FS phenomenon. It could be viewed that qualitative research tends to be holistic and explanatory, rather than reductionist and predictive

(Willig, 2001). A quantitative approach would, by its very nature, lend itself to predicting and defining preconceived variables which would not, in the case of this study, allow for flexibility and openness. As a result, if a qualitative approach is employed, assumptions, inappropriate research questions and false starts can be identified and the direction of the research modified accordingly.

Quantitative research relies heavily on pre-coded data collection techniques, whereas qualitative data collection gives participants the opportunity to dispute the researcher's assumptions regarding meaning and relevance of concepts and categories. This allows qualitative research to remain flexible and open-ended, which allows room for issues of validity to be faced. The concept of validity for qualitative researchers can be problematic. However, the methodologies adopted in this research take into account as much as possible the concepts of validity and reliability, section 3.3, p. 57 to 61.

Billington (2006) suggests the following questions developed in qualitative research methodologies are those which also face practitioners within educational psychology:

- How do we speak to children?
- How do we speak with children?
- How do we write of children?
- How do we write to children?
- How do we listen to children?
- And additionally, how do we listen to ourselves (when working with children)?

(Billington, 2006, p. 8)

The questions that Billington proposes have been a reflective and reflexive part of this study. Namely, how the methodology for this research was conceived and constructed and how approaches can influence future practice within the field of educational psychology.

Robson (2002) stated that it is now considered respectable and acceptable in all areas of social research to use designs largely or exclusively based on methods generating qualitative data. However, Miller et al. (2008) asserted that, within the field of educational psychology, a systematic review of seven key EP mainstream journals carried out by Shank and Angeli (2006) found that studies employing qualitative methods featured rarely between 2000 and 2005. They also identified that when qualitative methods are chosen, it

is usually within the format of a mixed methods approach, this shall be considered in section 3.2.3 p. 57. This study will attempt to demonstrate, as Robson (2002) asserts, that pure qualitative methods can be appropriate, provided the methodology, purpose and context of the study are rigorously adhered to.

Much of the literature written about qualitative analysis implies that there is no 'right' or 'wrong' method. Ritchie and Lewis (2003) cite some of the key aspects of a qualitative methodology which include; the overall research perspective and the importance of the participants' frames of reference; the flexibility the research design can afford; the richness of the data set; and the distinctive approaches to analysis and interpretation. The above authors also identify specific methods of data collection associated with a qualitative research approach; interviewing; narratives; group discussions; and observational methods. It is important to recognise that Ritchie and Lewis (2003) assert that there is no single, accepted way of doing qualitative research. One aspect of qualitative research that could be viewed as distinctive is the way in which each researcher's methods differ greatly from one to the next, providing great flexibility between data collection approaches.

It is important to stress and understand that the research question, data collection technique and method of analysis are dependent upon one another. Willig (2001) asserts that "good qualitative design is one in which the method of data analysis is appropriate to the research question, and where the method of data collection generates data that are appropriate to the method of analysis" (p. 21). The questions, methods and data collected by this study have been cautiously selected to ensure an appropriate and robust qualitative research design.

3.2.2: Strengths and limitations of qualitative methods

There is much debate about what 'science' is and what that means for both qualitative and quantitative methods of research enquiry. Quantitative methods are largely viewed as using a scientific method, drawing on hypothesis testing, causal explanations and predictions. Qualitative methods are seen to reject this model, focusing on understanding, rich description and theory.

Yardley and Bishop (2008) assert that qualitative methods are rich in external validity by demonstrating how the findings relate to conditions in real life contexts. Qualitative methods are not confined to controlled, laboratory settings, a criticism which could be

labelled at quantitative methods. Rather, they are situated in context to explore meanings, processes and relationships. Qualitative research tends to focus on more subtle, interactive processes that occur within particular contexts. As a result, a smaller, deliberate selection of individuals is selected. However, it could be argued that the controlled laboratory setting can greatly improve the internal validity of quantitative methods, something qualitative methods may lack.

Qualitative researchers are often interested in the data that are excluded as 'outliers' in quantitative research. When asked about a topic, people may rarely produce a consistent response and instead offer an amalgamation of differing perspectives. It is this complexity that interests researchers who adopt a qualitative approach, as it allows them to go beyond the surface meaning and explore underlying constructs and beliefs.

Robson (2002) argues that the quality of a qualitative study depends to a large extent on the quality of the researcher, suggesting it is not an approach that follows a particular formula. Researchers should be well trained and experienced investigators and utilise personal qualities such as "an open and enquiring mind, being a good listener, general sensitivity and responsiveness to contradictory evidence" (p. 167). These skills would be associated with many professionals who work with other people, most notably EPs.

Advocates of a quantitative approach have questioned the absence of assuring reliability and validity citing that replicating a study using identical circumstances is not possible. However, the methods and techniques associated with a quantitative approach would be inappropriate when exploring how people make sense of the world and how they experience events. There is a compelling argument that any scientific research needs to have a standard of rigour which addresses issues of validity and reliability. Yin (1994) states, in respect to replicating a study, that documenting the decision trail in qualitative research is equally as valid as specifying methodological details in a quantitative report.

Yardley (2008) highlights another limitation labelled at qualitative methods. Namely that it is often impractical to gather and analyse in-depth qualitative data from a large enough sample to be statistically representative of a wider population. This calls into question issues surrounding validity, reliability and how generalisable the findings can be to a wider population. However, neither qualitative nor quantitative research can provide certainty.

Another potential limitation of a qualitative approach is related to transcribing and analysis. When people's thoughts, experiences and activities are tape-recorded and transcribed, the reliability of the interpretation of transcripts may be weakened by a failure to transcribe what might be deemed trivial, but often crucial, pauses and overlaps. This subjectivity on the part of the researcher is a criticism often labelled at a qualitative approach. Also, elements such as tone and body language cannot be verified by those outside of the research process.

3.2.3: Mixed methods

Qualitative and quantitative research should not necessarily be seen as competing and contradictory, but could instead be viewed as complementary. Qualitative data can be seen as useful to supplement and illustrate quantitative data. The use of qualitative data can help to communicate ideas and thoughts by highlighting the quantitative information presented. However, if qualitative data are used in small amounts alongside a large quantitative sample, Robson (2002) asserts that the qualitative information will not justify the complexity of the analysis. Another potential pitfall is described by Yardley and Bishop (2008), as difficulties can arise if the qualitative data and the quantitative data contradict one another.

As with any research, the relative advantages of qualitative and quantitative methods depend on the purpose and topic of enquiry. A purely qualitative methodology would be more suited to exploring the perceptions and experiences of children and their parents. The reason for this is qualitative research concerns itself with the quality and richness of the experience. Adding a quantitative dimension to supplement the analysis of children and parental views was not deemed appropriate given the exploratory nature of the research.

3.3: Validity and reliability

Validity refers to the extent to which research describes, measures or explains what it aims to describe, measure or explain (Willig, 2001). Validity as a concept can be described with two distinct dimensions, internal validity, which suggests investigating what is claimed to be investigated (Arksey & Knight, 1999) and external validity, the extent to which abstract constructs generated, refined or tested are applicable to other groups within the population (Le Compte & Goetz, 1982).

Reliability refers to the extent to which a study can be replicated and whether, if the same or similar methods were used, the findings would be repeated. This poses potential problems for a qualitative approach that concerns itself with naturalistic behaviour or exploring unique phenomena. A large proportion of research conducted in a qualitative manner occurs in a natural setting. Indeed, the school setting in which this research takes place is itself an 'open system', which is in a constant state of change and flux, developing and interacting at a number of levels, individually and collectively. For this reason, validity and reliability could be called into question when conducting a qualitative study.

3.3.1: Internal validity

Comprehensiveness in this study has been addressed by adopting the thematic analysis method of analysis. The entire data set was considered and incorporated within the process of analysis. It could be argued that this level of comprehensiveness goes beyond what may normally be demanded in quantitative methods. By working with a smaller data set open to repeated inspection, as is the case in this piece of research, it allows for generalisation to be tentatively suggested, as the entire set of data has been rigorously scrutinised. However, it is acknowledged that it would be inappropriate to make any sweeping generalisations to other contexts, given the small sample size and the research taking place in one setting.

The very nature of comprehensive data treatment implies the researcher being actively involved in seeking out any anomalies or deviant responses. Silverman (2010) argues that the identification and further analysis of deviant responses can strengthen the validity of the research being conducted. Where possible, deviant cases were identified by using a thematic analysis approach, see section 3.6, p. 61 to 70.

3.3.2: External validity

Triangulation refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings. Since much social research is founded on the use of a single research method and as such may suffer from limitations associated with that method or from the specific application of it, triangulation offers the prospect of enhanced confidence. Denzin (1970) extended the idea of triangulation beyond its conventional association with research methods and designs. He distinguished four forms of triangulation:

1. Data triangulation, which entails gathering data through several sampling strategies, so that slices of data at different times and social situations, as well as on a variety of people, are gathered.
2. Investigator triangulation, which refers to the use of more than one researcher in the field to gather and interpret data.
3. Theoretical triangulation, which refers to the use of more than one theoretical position in interpreting data.
4. Methodological triangulation, which refers to the use of more than one method for gathering data.

Triangulation assumes that by using different sources of information it will help to both confirm and improve the clarity of a research finding. Different forms of triangulation, such as methods triangulation and theory triangulation, can help to provide credibility to a study. However, triangulation methods have their limitations in how much they can confirm a finding. Hammersley (1992) states that it can never be known, with any real certainty, that an account is true because there is no independent and completely reliable access to 'reality'. Ritchie and Lewis (2003) believe that, with Hammersley's notion in mind, validity must be judged on the basis of the adequacy of the evidence offered in support of the phenomena being described. It must be stated that this research has been able to triangulate sources of data to a degree using data and methodological triangulation. Two different perspectives were gathered and two methods of gathering data employed, namely using semi-structured interviews to gain children's perceptions and a focus group of parental perspectives.

3.3.3: Internal reliability

As well as the variation of the skills and individual styles of researchers, Le Compte and Goetz (1982), state that the "format, structure and focus of ethnographic field notes can vary within the research problem and design" (p.15). To counteract these imbalances, low inference descriptors that are as robust and accurate as possible are essential for any piece of qualitative research. Descriptors can include verbatim accounts of what people say through the process of a semi-structured interview, as well as narratives of an individual's behaviour and activity. The importance of how the data are collected and interpreted can provide the researcher with a rich set of responses. This can provide multiple examples of any themes or patterns suggested which establishes credibility. This study has focused on detailed transcriptions resulting from semi-structured interviews and

a focus group. These transcriptions have been subjected to a rigorous thematic analysis, see section 3.6, p. 73 to 78.

Advantages can be found in the flexible and adaptable way an interview can be carried out, but interviewing requires considerable skill and expertise. Questions can be raised about the reliability of interviews given the lack of standardisation and bias. Also, leading questions can be difficult to rule out. As Montieth (1999) highlights, it is important to recognise the tension between standardisation and flexibility. With increased flexibility the degree of standardisation decreases. The use of semi-structured interviews with their flexible approach and use of prompting can be more qualitative and focused. Nevertheless, although the reliability may be called into question through a reduction in standardisation, it is felt that the credibility and accuracy of this study was increased by ensuring that each child understood the question asked. Clark (2004) reports a need to 'think differently and be flexible' (p.153) when conducting research with young children, it was for this reason that a teddy bear, referred to in the thesis proposal (Appendix 1, p. 163), was chosen as a tool to illicit younger children's thoughts and experiences. Flexibility was a factor that needed to be kept in mind, given the age range for children participating was between five and ten.

3.3.4: Researcher's position

The individual conducting this study is currently a third year trainee on a Doctoral Educational Psychology course. Therefore, some knowledge of research and an understanding of schools, systems, child development and psychological theory were held prior to carrying out this piece of research. The position of this study is such that some knowledge of the FS initiative was held prior to the project being initiated. Subsequent research informed the ethical proposal and methodology of the study, which led to research questions being posed. Throughout the data collection process, the researcher attempted to remain as impartial as possible to ensure participants did not feel influenced in any way when they offered a response to posed questions. However, it is not possible to fully remove bias as all individuals hold their own views and constructions. Also, it is almost impossible to remove bias totally from any piece of research.

3.3.5: External reliability

Throughout the research process this study considered the extent the researcher was a member of the group being studied and what positions and bias were present. Respondent bias can take various forms. Robson (2002) states that bias can range from

obstructiveness and withholding information to a participant attempting to provide the answers he/she thinks the researcher is looking for. For example, if another researcher attempted to replicate the findings of this study, he/she would need to develop corresponding social positions. Research reports must clearly state the researcher's role and status within this instance. The importance of reflexivity for the researcher is paramount according to Davis, Watson and Cunningham-Burley (2000). Researchers must demonstrate an awareness of how they can influence and have an impact on the research process. Identifying potential issues, such as clarifying personal value systems and areas of subjectivity, can be problematic for researchers, as there is typically a close relationship between the researcher and participant.

Another element to consider is the social context in which the data are gathered. Participants might differ in what they may report in one context compared to another. It is important for qualitative researchers to specify the social settings where the data are collected. This study involved children and parental participation. It was felt younger children required a familiar adult to be present during the process. This decision was taken to provide a safe environment so that each child felt comfortable and reassured. It was hoped this would allow young children to feel open to share their thoughts and experiences more readily than if they were meeting the researcher by themselves. Conversely, this decision could have had an effect on what children felt able to report at the time, and as a result may have experienced inhibitions by having a familiar adult present. It is important for this study to ensure a clear explanation of the physical, social and interpersonal contexts within which the data are gathered to enhance the probability of this piece of work being replicated. To replicate a study is impossible without precise identification and thorough description of the strategies used to collect data. Ideally, the methodology presented will be clear for other researchers to use this report as a template by which to replicate the study.

3.4: Procedure

Initially, a decision was made to identify a mainstream primary school within a particular LA. Approval from the Chief Education Officer (Appendix 2, p. 167) was given and FS leaders for that LA were contacted to acquire a list of schools who had been implementing the FS initiative for more than two years. A school was randomly selected from the list provided and the head teacher was contacted directly through a telephone conversation.

The head teacher was asked whether he/she would be willing for the research to take place within his/her school.

The head teacher of the participating primary school was then sent an e-mail, (Appendix 3, p.169). Within this e-mail, the rationale and aims of the study were set out, as well as detail about the participants needed and method for collecting data.

On meeting the head teacher, it came to light that the chosen school was not implementing the FS initiative at a whole school level. As a result, a decision was made not to pursue the research with this chosen school. The remaining schools provided by FS leaders were contacted and enquiries made regarding whether the FS initiative was being implemented at a whole school level. After exhausting all possibilities, it became apparent that no school within the chosen LA had been implementing the FS initiative at a whole school level.

A decision was made to contact another LA and repeat this procedure. Approval from the Chief Education Officer was sought to contact schools within the second chosen LA. Once approval had been granted, FS leaders were contacted for a list of schools within that LA which had been implementing the FS initiative for more than two years. A list of five schools was provided. The five schools were all contacted to explore whether the FS initiative had been implemented at a whole school level. Of the five schools, two satisfied the criteria and both were willing to participate. A decision was made about which school to select through a random selection process. Both schools were then contacted to explain the outcome.

A meeting was held at the chosen school with the two members of staff who had been trained as FS leaders. During this meeting, the procedure and requirements were outlined and discussed. Subsequently, school staff sent out a pre-prepared consent letter with every child in years one to five (Appendix 4, p. 171). Parents were asked to return the consent form within five working days. Information was also asked about whether one or both parents would be willing to participate in a focus group, to be arranged following the children's interviews. The response rate is shown in Table 2 (p. 63). A date was arranged to carry out two pilot interviews, one with a child in year one and another with a child in year five (section 3.5.2, p. 66). After the first deadline had passed, no parents who had

children in the year two class had given their consent. School staff sent out another letter, but this also proved unsuccessful.

Table 2 – Response for child / parent consent form

Year group	Consent forms sent out	Returned with no signature	Signed consent forms returned	Males	Females	Parents willing to participate
Year 1	29	2	10	4	6	3
Year 2	28	0	0	0	0	0
Year 3	31	0	17	9	8	5
Year 4	32	0	12	5	7	3
Year 5	30	1	17	7	10	6
Totals	150	3	56	25	31	17
Response rate			37%			11%

When parental permission had been obtained, consent forms were arranged by year groups and by gender. Children were then randomly selected and names were provided by the school. Ten children aged between four and ten years old who had taken part in the FS initiative within the school were invited to take part in one-to-one semi-structured interviews – see tables 4 and 5, p. 70-71 for sample details. The year groups chosen for this research were years one to five, to provide a range of experiences and reflect the development stages of the children. Children in year six were excluded as they were likely to have been involved in school assessments during the summer term. The gender split was five males and five females, chosen to ensure that a gender bias did not occur. Due to a poor response from parents whose children were in year two, a contingency needed to be introduced and so two boys and two girls from year one were interviewed. Children with special educational needs were not included in the random selection, as the nature of the small scale interviews required them to have a sufficient level of verbal communication skills. Children were not aware of the selection criteria used for the sample.

Two pilot interviews were initially conducted. Subsequently, the children from their respective year groups were interviewed individually, unless they stated a preference for a familiar friend or adult to be present. Five children from year one (including one of the pilot interviews) were accompanied by a familiar member of staff during the process. At the start of the interviews, children were reminded about the consent letter they had taken home and were asked to sign a consent form themselves (Appendix 5, p. 174). Where possible during the interviews, children's body language, gesture and intonation was noted but it was thought vitally important to be seen to actively listen to the children when they were talking, which meant that some of the nuances of the interview may have been missed.

Each interview took between thirty and forty-five minutes. Prior to each interview, it had been pre-arranged with the head teacher and school staff for children to meet the researcher outside on the log circle. This measure was taken to ensure that all children felt comfortable with the researcher, and gave an opportunity to build a rapport prior to the semi-structured interview. It was also agreed that children would show the researcher around the areas used in school during FS sessions. The rationale behind this was to provide the researcher with a more comprehensive picture when children spoke about activities and areas within the school during the interview. The length of time that children showed the FS areas varied between fifteen and twenty-five minutes, depending on how many places they wished to show.

A script, (Appendix 6, p. 175) adapted for older and younger children, was read to each child with the instruction that he /she could stop and withdraw from the process at any time. However, it was also communicated that after an agreed period of time, once the interview had been transcribed and anonymised, withdrawal would no longer be possible. After each interview the children were debriefed and given a debrief letter to take home to their parents (Appendix 7, p. 176). They were also thanked for their participation. A thank you note (Appendix 8, p. 177) was presented to each child immediately following the interview.

Each interview was recorded using a dictaphone and transcribed verbatim within a period of four weeks following the interviews. All interviews were confidential. The majority of the

interviews (six) took place in the school staff room due to a lack of space within the school. This may have been unsettling for children as they did not appear used to sitting in this room. The remaining four took place outside at the log circle. Names of children, places and any individuals mentioned were not included in the transcripts to maintain deep anonymity and each child was randomly assigned a number to replace their name. Once transcribed, the audio tapes were held until September 1st 2011, as stated in the debrief letter, and then destroyed.

Following the children's interviews, parents who had previously given their permission to take part in a focus group were contacted by telephone or e-mail. After liaising with school, parents were informed of a convenient time and date for a focus group to take place in school. Six parents attended the focus group, one male and five female, which lasted for approximately one hour. At the start of the focus group, parents were shown their consent forms and asked if they were still willing to participate. The focus group was also recorded using a dictaphone. The discourse was transcribed within a period of two weeks following the focus group and the audio tape was subsequently destroyed. Further detail is provided in section 3.5.6, p. 72.

3.5: Data collection

3.5.1: Semi-structured interview with children

Willig (2001) asserts that "Semi-structured interviewing is considered the most widely used method of data collection in qualitative research in psychology" (p. 21). That is not to say this approach is the 'easy option'. On the contrary, this approach needs careful planning and consideration of who to interview and why, how to recruit participants, what to ask and how to record and transcribe the interview.

This study explored the perceptions of children across the Foundation Phase and KS2. This decision was taken to provide some understanding of children's thoughts regarding their experiences of FS at both levels. The rationale behind this decision was in relation to research studies primarily focusing on the Foundation Phase curriculum. Children's views at KS2 were considered to be an area that had not been represented in the research literature.

Robson (2002) advocates allowing a factor of ten between tape time and transcription time “a one hour tape takes ten hours to transcribe fully” (p. 273). A large investment in time to arrange and conduct interviews and subsequently transcribe the data is necessary, which can be perceived as a limitation in using this method.

3.5.2: Pilot interviews

Piloting any new type of questioning prior to the main study is seen as an essential feature of good research (Silverman, 2010). The pilot interview provides an opportunity to practise interview technique, as much as trialling the interview schedule so its feasibility can be checked (Robson, 2002).

Two pilot interviews were conducted, one with a year one child and another with a year five child. This was to ensure that the questions were age appropriate and the prompts and activities were suitable (Appendix 9, p. 178). By piloting the designed questions, a sense was gained for whether responses provided enough detail around the subject. The nature of designing a piece of qualitative research is to take a leap of faith, as there will always be unexpected variables that cannot be predicted.

Following the pilot interviews, some changes were made to the ordering of questions and question nine, ‘is there anything else?’ was omitted from the original interview schedule as this was being asked as a matter of course.

Questions five and six asked pupils what they liked and did not like about FS. Both pupils appeared to have difficulty responding to these questions. A decision was taken that for future interviews, providing a series of photographs depicting FS activities could be used as a prompt, only if children had difficulty thinking of an initial response (Appendix 10, p. 179). Also, both pupils, especially the younger child, appeared to have difficulty when asked question seven ‘How do you feel when you take part in FS?’ It was decided to provide a prompt, using visual pictures in the form of faces showing different emotions, for the remaining interviews. An equal number of positive and negative emotions were shown to avoid potential bias (Appendix 11, p. 180).

Each participant was asked to provide feedback and comments following the interview. Issues around time management, whether the interview was too short or took too long and

organisation around the school timetable were addressed. A reflexive approach was taken with regard to the interview questions and interview technique.

After reflecting on the overall content of both pilot interviews, there was a sense that the questions alone did not elicit as much of a response as had first been hoped. A variety of reasons may have affected this outcome, ranging from questions being too vague or too general. Also, the very fact that children and not adults were being interviewed, meant that individual's level of understanding, recall, language, thinking skills, confidence, and potentially the setting, may have been contributing factors in their responses. Due to the open-ended nature of each question, a decision was made to include supplementary questions in the form of prompts. Prompts would be used if respondents appeared to have difficulty, such as not understanding or if a short response was offered.

However, due to the unpredictability of conducting semi-structured interviews, which was heightened as a result of children being chosen as participants, a flexible approach to prompts was felt the best approach. Prompts were used when it was felt that the participant may have been able to expand on their initial response, but this was difficult to predict. The role of the researcher became one of facilitator, as opposed to dictating exactly what would happen with pre-determined prompts. Where possible, attempts were made to maintain a standardised approach and yet be adaptable to the context of the interview and participants' needs.

3.5.3: Interview schedule

During semi-structured interviews, a set of questions can be used to guide the process. These questions do not necessarily need to be adhered to rigidly, but the greater the deviation from the schedule, the greater the possibility of validity and reliability being called into question.

The interview schedule was conceived by researching and exploring a range of interview questions used with children, such as the Mosaic Approach used by Clark and Moss (2001 and 2005). The interview schedule consisted of open-ended questions. Questions were kept short and straightforward in an attempt to involve both younger and older children in the research. The technique of funnelling was built into the interview schedule. This technique was used to elicit participant's general views regarding FS between questions one to four. More specific questions were subsequently asked on more specific issues

such as learning, feelings and development. This technique enabled participants to give their own views at the outset of the interview before funnelling them into more specific questions of concern to the study.

Robson (2002) makes some suggestions when constructing an interview schedule for a semi-structured interview. The interview schedule has been based on the following principles:

- introductory comments (verbatim script)
- list of key questions to ask participants
- set of associated prompts – visual and verbal
- closing comments

The interview schedules for children and parents can be found in Appendix 9, p. 178 and Appendix 12, p. 185. Further information relating to the construction of each schedule is provided in the next section.

3.5.4: Links between the research questions and interview schedule

The data set included sections of the transcripts that primarily focused on questions one to seven, nine, ten and twelve that elicited children's perceptions of FS initiative. All transcripts were analysed rigorously, leading to the identification of main themes and sub-themes for each research question. A rationale for each question has been provided below.

Table 3 – Explanation of the rationale behind the interview schedule, Q1 - children's perceptions

Q1. What are children's perceptions of the Forest School initiative?

Q1. Ice breaker – meet child and ask them to show me around the FS area.

This was designed to build a rapport with each child prior to the more formal semi-structured interview. Also, it would provide some insight into children's initial views of what they perceived as important areas when engaged in FS.

Q2. Can you tell [me / name of soft toy] about FS?

Question two attempted to gain children's understanding of what FS means to them. For younger children the soft toy was used.

Q3. What do you do in FS?

Q4. Where do you go when you do FS?

These questions asked the children what they did and where they went in order to obtain some detail about the experiences and activities they had participated in and what they could recall about these experiences.

Q5. What do you like about FS?

Q6. What don't you like about FS?

A selection of photographs of FS activities, taken from published studies, were used as a prompt to support children's thoughts about what they liked / disliked. This only took place after the child had been given time to think of and offer a response (Appendix 10, p. 179).

Q7. How do you feel when you take part in FS?

This question was posed to gain an understanding of children's feelings and emotions when taking part in FS. Feelings cards were used as a prompt for children once they had been given time to think of and offer an initial response. (Appendix 11, p. 180)

Q9. What are the best things about FS?

Q10. What are the least enjoyable things about FS?

These questions sought to explore what elements of FS children enjoyed or did not enjoy. The question was asked to look at whether certain activities would be more prevalent than others

Q12. What is the one thing you would tell [name of soft toy] about your FS experience?

Allowing children the chance to chose one aspect of FS was designed to explore what they felt was the most important or enjoyable/least enjoyable aspect of the initiative from their perspective.

Table 4 – Explanation of the rationale behind the interview schedule, Q2 - parents' perceptions

<p>Q2. What are parents' perceptions of the Forest School initiative</p> <p><u>ParentQ1. What is your understanding of the FS initiative?</u> <i>This question was posed to ascertain parent's level of understanding about FS.</i></p> <p><u>ParentQ2. What activities has your child told you about doing in FS?</u> <i>This question sought to explore whether children had shared their experiences, things they had learned through FS sessions and activities, with their parents outside a school context.</i></p> <p><u>ParentQ3. What do you think of the FS initiative?</u> <i>Gaining what parents thought of the FS initiative was an important aspect to the focus group. This question allowed some insight into what parents view, whether they were positive or negative or indifferent.</i></p> <p><u>ParentQ4. What do you think your child feels about taking part in FS?</u> <i>Asking this question from the perspective of their children was designed to encourage parents to reflect on what they thought their children felt.</i></p> <p><u>ParentQ5. Which elements of FS does your child enjoy?</u></p> <p><u>ParentQ6. Which elements of FS does your child find difficult?</u> <i>The above questions sought to gain parents perspectives of what they felt their children enjoyed. It was also asked to try to gain an idea as to whether parent's understanding of FS was sufficient enough to know what their children might enjoy or find difficult.</i></p>

Table 5 – Explanation of the rationale behind the interview schedule, Q3 - learning and development

<p>Q3. What potential influence can Forest School have on children's learning and development?</p> <p><u>Q8. What new things (skills) have you learned from FS?</u> <i>This was designed to encourage children to think about what key skills they felt they had developed as a consequence of taking part in FS. This would also provide some insight regarding what children understood to be a key skill.</i></p> <p><u>Q11. What are you better at now you have gained experience through FS?</u> <i>This question was designed to explore what children felt they had developed as a result of taking part in FS. This question was deliberately non-specific to provide children with an opportunity to respond how they wished, whether it was linked to learning, development or something else.</i></p> <p><u>ParentQ7. What skills do you feel your child has learned?</u> <i>As with question eight for children, this was designed to encourage parents to think about what parents understood to be a skill. Also, looking at what parents felt were the key skills that their children had developed from taking part in FS.</i></p> <p><u>ParentQ8. Can you give any examples of how the FS initiative has had an effect on your child's learning?</u> <i>This question sought to explore whether parents could draw links between what their children may be learning through FS and how it may be influencing their learning in another context, like home.</i></p> <p><u>ParentQ9. In what ways do you think the FS initiative has had an effect on your child's development?</u> <i>This question had the same purpose as the one above only linked to children's development.</i></p> <p><u>ParentQ10. What effect have these skills that they have learned had on the home environment?</u> <i>This final question asked parents to relate the skills they felt children had developed to the home environment and whether they felt FS had played any part in developing their children's skills.</i></p>
--

3.5.5: Materials

The following materials were used during the data collection process:

- child / parent consent forms to check gender and year group; (Appendix 4, p. 171)
- child friendly consent forms agreeing to take part; (Appendix 5, p. 174)
- script to be read to children before the interview is recorded; (Appendix 6, p. 175)
- debrief letter for parents and children; (Appendix 7, p. 176)
- thank you letter to be given to children following the interview; (Appendix 8, p. 177)
- photos of FS activities; (Appendix 10, p. 179)
- emotion pictures with faces and written words printed; (Appendix 11, p. 180)
- dictaphone and individual tapes for each interview;
- spare batteries;
- notepad to make notes during each interview;
- soft toy to be used for younger children, Fuzzy bear.

3.5.6: Focus groups with parents

Focus groups originated in market research in the 1920s, arising from the recognition that many consumer decisions were made in a social, group context (Bogardus, 1926). Today, focus groups dominate consumer research, but are also being applied in a variety of fields, such as health, education and academic social research (Barbour, 2007).

A focus group usually consists of six to ten participants led by a facilitator. Kvale (2007) states that focus groups are characterised by a non-directive style of interviewing, where the prime concern is to encourage a variety of viewpoints on the topic in focus for the group. The aim of the focus group is not to reach consensus about, or solutions to, the issues discussed, but to bring forth different viewpoints on an issue.

Parents' perspectives were sought to supplement the perceptions of children and also to identify any potential ripple effects of the FS initiative at home, suggested by Murray and O'Brien, (2005) and Griffiths et al. (2010) in chapter 2, section 2.2.3., p. 13. In this research, the purpose of conducting a focus group with parents was to gain a more holistic perspective of children's experiences. It was considered that gaining parental perspectives about their children's experiences and development would provide greater clarity to either support or dismiss potential themes identified from the semi-structured interviews with children.

A particular strength of focus group research is that it is not tied to a specific theoretical framework, used within an essentialist or social constructionist framework. In this study, the focus group was conducted from an essentialist framework, based on the assumption that individuals have their own personal ideas, understandings and opinions and the researcher attempted to draw out individuals' thoughts.

The focus group schedule (Appendix 12, p. 185) was constructed to engage participants, use appropriate vocabulary and ensure questions flowed in a logical manner. Opportunities for a variety of viewpoints to be raised were also kept in mind. At the outset, a recap of the study was provided for participants and the procedure that was to be followed was outlined. Some basic ground rules were established, such as listening when someone was speaking and not interrupting. Closing comments were also provided at the end and participants were given an opportunity to raise any questions. Each participant received a debrief form (Appendix 7, p. 176) and were thanked for their time and thoughts.

3.6: Data analysis

Thematic analysis is perhaps viewed as a poor relation when qualitative methods are discussed. Critics have questioned its validity as a method. It must be stated that a thematic analysis approach has much in common with other approaches; an integral part of many qualitative methods is to explore themes from a data set. Ryan and Bernard (2000) see the method of coding as a process within more well documented approaches such as grounded theory, however, Braun and Clarke (2006) argue that thematic analysis is worthy of being considered a method on its own merits. Methods such as grounded theory (Glasser, 1992; Silverman, 2001) or Interpretative Phenomenological Analysis (IPA) (Smith & Osborn, 2003) are well documented in qualitative analysis literature. The approaches are outlined and worked examples explained, whilst providing a critique of the psychological theory that underpins each approach. Advantages and disadvantages are often discussed. As mentioned previously in this study, section 3.3 p. 57 to 60, the reliability and validity of its method has been considered carefully. A thematic analysis approach, based on Braun and Clarke's (2006) template for analysis, would further ensure a robust and clear piece of research. Boyatzis (1998) defined thematic analysis as:

A method for identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes the data set in rich detail. However, frequently

it goes further than this, and interprets various aspects of the research topic.
(Boyatzis, 1998, in Braun & Clarke, 2006, p. 79).

Braun and Clarke's (2006) article provides much needed clarity of explanation of thematic analysis and how it should be implemented. They also attempt to reinforce the flexibility of the approach whilst providing a step-by-step guide on how thematic analysis can be used.

This guide provides support to the decisions taken when using thematic analysis. Decisions such as, providing a detailed account of the data set vs a rich description, and whether to adopt a semantic or latent level. These decisions provide clarity about the process and procedure which can often be insufficient according to Attride-Strling's (2001) viewpoint. This study has included the sometimes less notable aspect of how an analysis is completed, whilst explicitly stating what has been carried out and the reasons for these decisions.

Braun and Clarke (2006) believe thematic analysis is an approach that can be applied across a range of theoretical and epistemological approaches, rather than being immersed in a number of specific approaches. Given this flexibility, it was viewed as a highly compatible analytical method to complement a study of this nature, as a detailed analysis was required to identify common patterns and themes from participants' perspectives.

It must be stressed that it is not only the participants' perspectives that are of importance. The position of any researcher attempting a qualitative piece of work needs to remain mindful of his/her own theoretical position and values and acknowledge these transparently. A researcher's role is an active one, playing an integral part in any analysis of this type when identifying patterns and themes. The theoretical framework that is chosen should, as stated previously, be the most appropriate to what is being asked and investigated. Any decisions made must be acknowledged and recognised as key to the methodological process.

Braun and Clarke (2006) indicate that thematic analysis offers great accessibility as an analytical method, and state that the approach should be seen as a foundational method of analysis. This would provide researchers unfamiliar with a qualitative approach with the core skills that can be transferable to other more complex methods of analysis.

Approaches such as conversation analysis (Drew, 2008) and IPA (Smith & Osborn, 2003) stem from a specific theory or epistemological position. With the aforementioned methods, there is little scope for variability in how each method is applied. Braun and Clarke (2006) suggest that they could be viewed as one recipe guiding the analysis. Other approaches differ in their methodology but still remain within an existing broad framework. Methods such as discourse analysis (Willig, 2008) or grounded theory (Glaser, 1992; Silverman, 2001) would fall into this category. Braun and Clarke (2006) claim that thematic analysis represents an alternative analytic method when using qualitative data to explore patterns. Thematic analysis has been chosen due to its flexibility for not being constrained to a theoretical position, as grounded theory would advocate.

Another consideration that Braun and Clarke (2006) postulate is that, unlike other methods like IPA or grounded theory, thematic analysis is not wedded to any pre-existing theoretical framework. This allows for adaptability when making key decisions for its implementation. Braun and Clarke (2006) state that thematic analysis can be an essentialist/realist method which focuses on detailing realities of participants, the meanings they derive from their realities and the experiences they gain. The authors also state that thematic analysis can follow a constructionist paradigm which explores the way in which events, realities, meanings and experiences effect a range of discourses within society. Alternatively, a 'contextualist' method which sits between essentialist/realist and constructionist methods may be used. Thematic analysis can be a method that acts both to reflect reality and to unravel the surface of reality. In outlining these methods, one decision that is paramount to this approach is outlining explicitly the theoretical position of a thematic analysis. This position has been outlined in the following section.

Key decisions were made regarding the nature of the thematic analysis involved in this piece of research. A continuous process that influenced these decisions was the ongoing reflexive dialogue described throughout the methodology.

3.6.1: Detailed account versus rich description

A detailed account can be seen as one way of approaching thematic analysis. The detailed account focuses on one particular theme or group of themes within the data set. This approach may be related to the specific question being investigated or an area of interest within the data.

An alternative approach is to provide a rich thematic description of the entire data set so the reader obtains a sense of the principal themes. It is important at this stage to be mindful that any identified themes need to accurately reflect the content of the entire data set. Braun and Clarke (2006) state that by analysing data in this way, some depth and complexity can be lost if the report being produced is constrained by a word count. However, a rich description of the data set would be maintained. This method would be particularly useful if the area being investigated was under-researched, or when working with participants whose views on the topic were completely unknown.

A decision was made to adopt a rich thematic description of the data set because the research aims were very open-ended. The study was mindful of the notion reported at the outset of this chapter that the method chosen should be the most appropriate to what is being asked and investigated. No particular themes or specific questions had been identified at this early stage in the process, so a detailed account may have restricted the focus of the analysis and provided too narrow a perspective. In contrast, the rich description method is highly applicable to areas that are under-researched and when participant's views are unclear. Therefore, a rich description was considered the most appropriate approach.

3.6.2: Theoretical approach versus inductive approach

A theoretical approach identifies themes or patterns within data using a 'top-down' approach (Boyatzis, 1998). The thematic analysis would be motivated by theoretical interest in a specific area. As a result, this approach is more analytically driven. This lends itself to a more detailed analysis, as discussed previously, which was deemed inappropriate for this study.

An inductive approach postulates that themes identified are strongly linked to the data themselves (Patton, 1990). Unlike the theoretical approach, themes and patterns are

identified using a 'bottom-up' approach (Frith & Gleeson, 2004). Similarities could be made at this stage with a grounded theory approach in that a topic is explored and levels of abstraction are built upon directly from the data. Using an inductive approach, data are collected specifically for the research and themes identified may bear little relation to the questions asked of participants.

A decision was made to adopt an inductive approach, which would fit with the previous decision of a rich description. In this way, the analysis stage is a process of coding the data, without trying to make them fit a pre-existing framework.

3.6.3: Semantic versus latent themes

A thematic analysis focuses largely at one level. This decision was made regarding the level at which themes were to be identified, whether it should be semantic or latent.

A semantic approach identifies the themes within the surface meanings of the data. As a researcher, the focus would not look beyond what has been reported by the participant or recorded by the researcher. The process of analysis involves a progression from description to summary to interpretation and theorising. Initially, a description is carried out of how the data have been organised to show patterns in semantic content. These patterns are then summarised and taken to a level of interpretation. At this stage, attempts are made to theorise the significance of the patterns and their broader meanings (Frith & Gleeson, 2004).

A latent approach is in contrast to the aforementioned semantic approach. The underlying ideas, assumptions and conceptualisations are examined at a deeper, latent level. Theoretical notions are seen to shape the semantic, surface meaning of the data. Analysis at this level would lend itself to a more constructionist viewpoint.

A specific initiative was the focus of this study exploring its perceived impact on learning and development. Therefore, a semantic approach was deemed appropriate for this study, as it aimed to explore the surface themes being expressed by participants. It was not deemed appropriate to explore underlying values or ideas that participants felt in relation to wider environmental issues or beliefs they may have held.

3.6.4: Epistemology: essentialist/realist versus constructionist

Research epistemology guides what can be reported about the data collected, and this informs how meanings are theorised. An essentialist/realist approach allows theory to be viewed in a more simplistic manner because a simple, largely one directional relationship is held between meaning, experience and language.

A constructionist perspective would argue that people's versions of events are socially constructed within contexts that are influenced by many inter-related factors, socially, culturally and ethically to name but a few. Thematic analysis implemented using this framework does not seek to focus on motivation or individual psychologies. Instead, the approach seeks to theorise the socio-cultural contexts and structural conditions that allow participants to provide their own individual account based on their constructs. Thematic analysis that focuses on more latent themes tends to have a constructionist stance as it seeks to develop themes, interpret meanings and the description that follows is already theorised within a constructionist perspective.

This study adopted an essentialist/realist epistemology, as a main focus of this research was to gain the perspectives of individuals. The study focused on motivations, experience and meaning so an essentialist/realist approach was considered to best fit these concerns.

The decisions regarding the analysis of this piece of research have been carefully considered. An inductive thematic analysis that explores semantic themes and patterns from an essentialist/realist epistemological viewpoint was deemed the most appropriate decision for this research. A rich description of the data set would enable exploration of an under-researched area and provide clarity to participants' views. Every effort was made to consider the reliability and validity of the decisions being taken, and it is the view of this study that the decisions and methods chosen are the most appropriate to what is being asked and investigated.

3.6.5: Method of data analysis

The following six step approach has been based on the Braun and Clarke (2006) paper 'Using thematic analysis in psychology'. This step-by-step guide offered a considered, flexible structure based on a platform of existing evidence.

A recursive process was adopted, moving forwards and backwards through the data set as needed, with coded extracts of data being analysed and notes kept as part of the process. This process was consistent for both the children's data set and parent's data set.

1. Familiarisation of the data:

- all ten semi-structured interviews were transcribed verbatim; (Appendices 13, p.183 & 16, p. 205)
- the data within the interview transcripts were made anonymous;
- accuracy of the transcripts was ensured by replaying the audio tapes for each interview whilst cross checking the transcribed interview;
- the entire data set was read and re-read a number of times to ensure familiarity with the data;
- initial notes were made to prepare for the next step in the process.

2. Generating initial codes:

- initial codes were generated from the entire data set;
- the data set was analysed systematically, giving full and equal attention to each data item;
- when analysing the data, efforts were made to code as many potential themes and patterns as possible. The same extract of data could be coded several times in relation to different emerging themes;
- data were organised into meaningful groups;
- initial codes were identified through underlining sections of the data with common themes using different colour pencils;
- the generated codes were compiled in a list; (Appendix 14, p. 199)
- the process of coding is described as "an ongoing organic process" (Braun & Clarke, 2006, p. 91) and a judgement was made with regard to when useful data have ceased to emerge;
- all sections of the data which were coded similarly were copied from the transcripts and grouped together in separate Word documents. (Appendices 15, p. 200 & 17, p. 217)
- each of the coded Word documents were printed for the next stage in the process

3. Searching for themes:

- Braun and Clarke (2006) suggest generating mind maps to demonstrate ways of thinking about the relationship between codes, between themes and different levels of themes;
- attempts were made to categorise the coded data into initial themes, by grouping the codes which appeared to convey similar meanings;
- themes were identified when aspects of the data demonstrated some significance or importance to the overarching research question;
- Themes were organised into primary main themes and sub-themes. (Refer to tables 6,7,8 in the Findings chapter)

4. Reviewing the themes:

- coded extracts were inspected to ensure there was cohesion;
- data extracts that did not belong to different themes were re-analysed and either re-worked or a new theme was created;
- some themes were discarded because there was insufficient support for them, whereas others conveyed many inter-relating elements and were amalgamated to form one theme;
- a review of the data set was carried out to ensure data had not been missed during the initial stages;
- thematic maps were developed demonstrating the links between main themes and sub-themes.

5. Defining and naming themes:

- at this point, further analysis helped to define and refine identified themes;
- each theme was given a name to provide a sense of what the theme was about;
- thematic maps were also refined to ensure the themes presented were clear and well developed (Appendices 18 to 22, p. 219 to 223).

6. Producing the report:

- analytic narrative was used to report the story of the data and examples of evidence to support themes were identified. Extracts were used to highlight particular aspects of the themes, these can be found throughout chapter 4.
- thematic maps were presented to provide a visual representation of how themes linked together.

3.6.6: How the themes, processes and thematic maps link

Thematic map for Q1 - Appendices 18 & 19, p. 221, 222

An initial thematic map was constructed based on the entire semi-structured interview data set. A number of main themes and sub-themes were identified from the generated codes. Within this thematic map the main themes of 'learning', 'developing child' and 'social' were deemed appropriate to form the basis of an initial thematic map for research question three and were removed. The remaining main themes were reviewed and where it was felt appropriate renamed, 'school ethos' becoming 'community', 'emotions' becoming 'feelings' and 'environment / nature / outdoors' becoming 'outdoor experience'. The sub-themes were analysed again, and where appropriate amalgamated or discarded, for example, 'motivation of school' and 'knowledge and awareness of pupils' became 'whole school approach'. The sub-theme of 'cross curricular approach', although initially placed with the main theme of school ethos, was felt to link more appropriately with the main theme of learning, explored in research question three.

Thematic map for Q2 - Appendix 20, p. 223

The thematic map for research question two was based on the parental focus group data set. Again, a number of main themes and sub-themes were identified from data. Four main themes were deemed appropriate based on the parents' comments, these consisted of 'home', 'communication', 'the classroom outside' and 'children undervalue experience'. A number of sub-themes were identified, each of these linked closely with the established main themes.

Thematic maps for Q3 – Appendices 21 & 22, p. 224, 225

The themes originally constructed from the initial thematic map for research question one were used to construct a new map for research question three. The main themes of 'developing child' and 'learning' and their related sub-themes were included alongside the main themes of 'community' and 'outdoor experience'. It was decided that because the main themes of 'community' and 'outdoor experience' had been explored in research question one, they did not constitute main themes in relation to this particular research question and were removed, leaving two main themes of 'learning' and 'developing child' and their related sub-themes. A number of minor sub-themes were amalgamated or removed as appropriate, for example, 'social awareness' and 'resilience' were felt to link

strongly with the sub-theme of 'maturity' and formed the new sub-theme 'maturity / awareness'. Also, 'learning opportunities' was deemed to have close links to 'richness of experience' and the two were combined. A similar decision was taken for 'memory / recall' and 'key skills'. The rigorous process of further analysis highlighted the direct and indirect links connecting the two identified main themes and sub-themes.

3.7: Generalisability

This study is unable to generalise the findings further than the data set collected due to the unique way the FS initiative is implemented in schools. It must also be noted that each LA is at different stages of supporting the initiative in schools. With this in mind, it would be unwise to speculate on the findings from this research outside of the parameters in which it took place. Also, because the research is qualitative in nature it can only be used as indicative rather than representative of children's and parents' views.

3.8: Ethical issues

The current research project has been conducted following the guidelines set out by both the BPS in 'Code of ethics and conduct' (2009) and by the School of Psychology at Cardiff University, 'Doctorate in Educational Psychology Professional Training Programme Teaching and Learning Handbook' (2011). An explanation is provided as to how ethical issues, confidentiality and gaining consent were managed, section 3.4, p. 61 to 65. Elmes, Kantowitz and Roediger (1995) provide further clarity with regard to the basic ethical considerations that apply to the consideration of participants in both qualitative and quantitative research.

Throughout the process, structured supervision was sought to clarify thoughts, processes and procedures relating to the project. Ethical approval was also sought and gained from Cardiff University Ethics Board to carry out the research outlined in the proposal (Appendix 1, p. 163).

Appropriate consent was gained at a number of levels, ranging from the Chief Education Officer of the LA where the research was taking place to the head teacher of the participating school and both parents and children that were asked to participate.

It is the responsibility of the researcher to ensure participants are fully informed about the procedure and provide consent to participating in the research before the data are collected. Participants were also given a debrief sheet about the nature of the research.

Participants were presented with the option of withdrawing at any stage from the study, subsequent to a specific date provided. They were also provided with information about how their data would be made anonymous. Following each interview and focus group, participants were debriefed.

Complete confidentiality relating to any information about participants is paramount during the research process. This was explained to participants and the data obtained from the interviews were made anonymous. Recordings were disposed of once interviews had been transcribed and checked for consistency.

Chapter 4 – Findings

4.1: Introduction

The findings presented are based upon the thematic analysis of ten interview transcripts from interviews with ten children, four from a year one class, two from a year three class, two from a year four class and two from a year five class. One parent focus group consisting of six parents was also subject to thematic analysis. These findings will be presented in the form of tables depicting the connections between the main themes and sub-themes. In addition to tables and thematic maps, written accounts will be given describing the main themes and sub-themes, with extracts to illustrate the points that are being made.

For continuity and ease of reading, the extracts presented in this chapter are presented in a uniform manner. All extracts are presented in italics, indented from the text and enclosed in double quotation marks. To demonstrate clarity between main themes and sub-themes, each of the main themes was allocated a letter code and each of the sub-themes allocated a letter and number code. Moreover, the main themes are presented in bold type. The sample size is described, with each research question subsequently presented.

4.2: How the data have been organised and presented

The study has obtained the views of both children and parents. Children and parental responses are analysed independently to provide an answer to questions one and two respectively. Both sets of data are then amalgamated to respond to the third question posed. Where relevant, the two sets of data are presented in conjunction with one another in this chapter.

The first part of this chapter shall consider research question one. The second part will then focus on responding to the second question posed, concluding with research question three. The research questions are used as titles for each section.

4.2.1: Details of the sample used

The details of participants included in the sample are provided below:

Table 6 – Details of the sample used for semi-structured interviews with children

Child	Male	Female	Pilot Interview	Familiar adult present	Setting for interview
Child 1		✓			Staff room
Child 2	✓				Staff room
Child 3	✓				Staff room
Child 4		✓		✓	Log circle
Child 5		✓			Staff room
Child 6		✓		✓	Log circle
Child 7		✓			Staff room
Child 8	✓			✓	Log circle
Child 9	✓				Staff room
Child 10	✓			✓	Log circle
¹ Child 11		✓	✓		Staff room
¹ Child 12	✓		✓	✓	Staff room
Total	6	6	2	5	

Table 7 – Details of parental sample used for the focus group

Participant	Male	Female	Child's Year Group
Parent 1		✓	Year 4
Parent 2		✓	Year 3
Parent 3		✓	Year 4
Parent 4		✓	Year 5
Parent 5		✓	Year 3
Parent 6	✓		Year 3

¹ Information from the pilot interview was not included in the process of analysis

4.3: Q1. What are children's perceptions of the Forest School initiative?

The data set included sections of transcripts that primarily focused on questions one to seven, nine, ten and twelve that elicited children's perceptions of the FS initiative. All transcripts were analysed leading to the identification of three main themes with six sub-themes. These themes are presented below:

Table 8 – Children's perceptions of the Forest School initiative

Main Themes	Sub-Themes
A. Feelings	A1. Positive feelings
	A2. Negative feelings
	A3. Fun and enjoyment
B. Outdoor Experience	B1. Appreciation of surroundings
C. Community	C1. Whole school approach
	C2. Resources

4.3.1: A: Feelings

This main theme encompassed how children felt about the FS initiative. Children expressed a number of feelings when conveying their thoughts and opinions regarding FS. Many of these views were expressed positively with interesting notions of negative feelings, which may not necessarily have been directly linked to the FS initiative. Furthermore, a sense of enjoyment and fun was transmitted by pupils, linked strongly to the positive feelings suggested.

4.3.2: A1: Positive feelings

Many children expressed a range of positive feelings throughout the interview. Positive feelings were related to the FS initiative, the activities and having the opportunity to work with friends or groups:

"Excited...When we are all getting dressed and wondering what we are about to do outside." [Child 5, 202-204]

"Happy...because I'm like with all my friends and we always have fun out there."

[Child 1, 143-145]

"Pleased...because I'm pleased that [name of class teacher] wants to go out with us on that day." [Child 10, 373-376]

"Happy. Because if we are in groups I'm allowed to work with someone...because you can help others and it's like well you can help others so if they are sad or anything you can help them because you are allowed to work with them." [Child 7, 369-373]

"I feel excited because we always do like fun activities out there so, yeah I feel excited." [Child 1, 136-137]

One child conveyed a number of positive feelings about how they felt when doing FS activities. However, although enthusiastic, the child seemed to place a great deal of pressure on himself to succeed:

"Really glad and happy. Most of the time I feel excited and brave. Brave because normally we are doing new activities and I feel, I just gotta try and push myself to the limits to do that activity...Yeah, and then if I have success I feel proud because I've done it right and I've actually picked it up." [Child 3, 444-449]

The words associated with positive feelings can clearly be seen in the word cloud below with words such as 'like', 'fun', 'nice', 'excited' and 'happy' being commonly used (Figure 3 on next page).

“... Other times if I’ve done it wrong I feel a bit frustrated because I really wanted to get it right.” [Child 3, 449-450]

Other negative feelings were reported when children talked about specific creatures or insects or rather poignantly, when flowers died or the sun went down:

“I don’t like touching creatures.” [Child 8, 286]

“Yeah, but I don’t like spiders...I’m scared of them...because they have got long legs they have.” [Child 6, 36-40]

“I don’t enjoy the flowers dying and I don’t like the sun going down.” [Child 4, 208]

One pupil indicated their frustration when having to take part in FS sessions when it was raining. However, they seemed to accept that when taking part in FS there was an element of fun to getting dirty:

“I would feel a bit annoyed because Forest School is one of my favourite subjects and I don’t really like getting wet...I don’t mind getting dirty that’s just the fun of going to Forest Schools is you can’t stop nature from doing it.” [Child 3, 360-365]

Some pupils responded positively when asked what it was they did not like about FS:

“I like all of it. There is nothing I don’t like about Forest School.” [Child 3, 345]

“Well, there’s nothing really. I like everything I think...No, I just like everything I do.”
[Child 10, 421-425]

4.3.4: A3: Fun and enjoyment

As with the sub-theme of positive feelings, a real sense of fun and enjoyment was conveyed by the children interviewed. Some children also suggested friendships played a part in their enjoyment. The activities that they were able to participate in seemed to be a factor in their enjoyment of FS:

"It is amazing because we get to do lots of fun activities and it's exciting and gives us all a chance to learn about the outdoors." [Child 2, 570-573]

"I feel excited because it actually makes me feel I gotta get into it and as soon as I hear [class teacher's name] say "We're doing Forest Schools" I'm like that "Yes!"
[Child 3, 427-429]

When children were asked what they liked and what the best things were about FS, the responses were positive, with the word 'fun' a recurring theme:

"Well it's probably all the activities we can do because every time we do go down there we do do a fun activity." [Child 7, 301-302]

"Happy...Because I'm like with all my friends and we always have fun out there...I feel pleased sometimes when we go out there because we are going to have fun...We'd all be pleased because we all like Forest School." [Child 1, 143-151]

"It's really fun...We get to do lots of different activities." [Child 2, 170-172]

The word 'fun' clearly stands out in the word cloud below which shows the children's frequently used words in the discussions relating to fun and enjoyment.

Figure 4 – Word cloud showing the main words taken from sub-theme A3: fun and enjoyment

children's experience of the outdoors. The attitudes children expressed about nature and their knowledge of how to care for their surroundings and interact with them safely, suggested a true appreciation of nature and their surroundings.

4.3.6: B1: Appreciation of surroundings

A number of children spoke about the need to look after nature which brought about a different meaning to the notion of safety, discussed in more detail in question three, p. 106. Children conveyed an awareness and respect for nature and the outdoor environment and that it needed to be looked after and cared for. Prior to and during the interviews children seemed to suggest that it was their responsibility, with support from the school staff, to maintain and nurture their surroundings:

"We also talk about things we should always do when we are outside like no littering." [Child 2, 186-187]

"We wouldn't break branches off trees and throw them on the floor because that's bad....Because it's destroying trees and we don't rip the leaves off because that will still be destroying trees." [Child 2, 190-194]

As much as the children were aware not to damage their surroundings, some children also demonstrated their awareness of the importance of caring and looking after nature and the natural environment in the school grounds:

"I think it's a butterfly garden...Yeah and we released some butterflies from there a couple of weeks ago...because it's a bit like attract nature and give them a bit of a home if they haven't got one." [Child 7, 181-186]

"...By here I like this area because again there is another Willow thing and again there is loads more trees trying to be cared and looked after." [Child 3, 187-188]

Another pupil spoke about how nice it is to be able to see 'bugs and creatures' and how they try to be friends with them:

"Well we come up here and we look for bugs and creatures and it's nice to see them because we can find some on the flowers and on the grass and we can find them on the wood and on the trees." [Child 6, 159-161]

"Because I like to be friends with creatures like I try to be friends with other creatures but they sometimes fly away. I'm a bit noisy I am." [Child 6, 258-259]

Another child also spoke about how children in the school appreciated the landscape and surroundings:

"By here is some more to do with plants. I like the view of this school because even though there are lots of cars here we are an eco friendly school and we like looking at the landscapes and everything. Up there is a beautiful landscape that most of the children like to look out the window at." [Child 3, 178-181]

One child, who was a member of the Eco-Committee, was very enthusiastic about the outdoor environment and wildlife. This child in particular genuinely expressed his/her passion for finding "endangered animals" outside of school and looking after them:

"Actually I like to try and find animals and if I find an endangered animal I would actually make a real nice habitat for it. Me and my friend, he has loads of snails in his back garden so we are trying to find endangered animals and we actually have a small box with loads of soil in and little trees so we um actually try and, we made like little plants and trees so we put the animal in there and take it back to his garden and put it in a safe spot that we think will be nice for that type of animal."
[Child 3, 258-264]

Children referred to a sensory element when involved in FS activities. Looking for mini-beasts, 'Going on a Bear Hunt', listening to wildlife were activities that encompassed the senses of touch, sight and hearing. These activities may have an influence on supporting children's awareness of the outdoor environment:

"Relaxed...Because it's very nice and I can smell all the beautiful things around...The leaves, the trees...it's just nice to smell the flowers and trees and leaves when they are wet. When they are wet they smell very nice." [Child 2, 410-419]

"The best things are like if we go on sunny days. It's good on sunny days...Because all the birds sing all the time." [Child 4, 198-200]

4.3.7: C: Community

It was noticeable how children conveyed a sense of community, by being aware of the range of projects each class had been involved in regarding FS. This applied to both older and younger children. It appeared that the school staff had ensured that each class within the school was aware of what was taking place, engendering a community spirit and a sense of ownership. This approach may have allowed children to feel that they are contributing to the development of their school environment and feel that they had done it themselves.

4.3.8: C1: Whole school approach

There was a sense amongst children that communicating the success of FS at a whole school level was a regular occurrence. The children indicated that at assemblies they were told about the work of other classes based on FS activities. Also, it was noticeable how aware both older and younger children were of which year groups had been involved in certain projects:

"Um, that's a bird feeder I think the Year 2's put that up there and we have got a big series of bird feeders going all around the school. Yeah um, and there is a bird nest up there somewhere...they always like mention it in assembly like what they've done." [Child 9, 115-119]

Child 4: *"Um, the big school with the big children in up there made some hedgehogs."*

MC: *How do you know that?*

Child 4: *"Because we always come here."* [Child 4, 55-57]

"I'm not sure what it is for, maybe it's the hedgehog thing. Hedgehog hut...This is something that the Infants made." [Child 2, 110-112]

Children communicated a strong feeling of community and were able to describe FS projects completed by other year groups and showed knowledge of trips other classes had attended:

"...We also have these like bird houses that the Year 6's made...They went, you know the [offsite woodland trip]?...They went as well a few days before and they brought back these bird houses." [Child 2, 441-447]

"Yeah, um some class um, down here there is like a hut that we made in Year 3 and that's the junior log circle. I think Year 6 made that (points)...that was like to hold all the wood and stuff because when we made our egg habitat we had to like take some wood from that." [Child 9, 73-77]

Another example provided by a different child shows how the whole school approach is consistent across specific groups within the school, such as the Eco-committee:

Child 3: *"...By here is the butterfly garden... I think it was [class teacher's name] who made this...Um, Year [says the year group - upper juniors]"*

MC: *How do you know this is a butterfly garden if you didn't do it?*

Child 3: *"Because I'm on the Eco-committee."* [Child 3, 19-26]

4.3.9: C2: Resources

Children and parents spoke about how resources such as practical tools, technology and waterproof clothing were utilised in school. Instances were given describing how these resources were used:

"We made pendants once which is like a necklace for like boys and girls...Well there was like loads of material. We needed like log circle things, a mini drill, string, felt tip pens." [Child 7, 161-164]

"And sometimes we have binoculars and we try to find the birds." [Child 8, 76]

"...We, I think we were searching for ants, any insects like spiders um, any common flies...we used a magnifying glass I think and then we took pictures of them, I think we did, uh, yeah." [Child 9, 250-254]

The waterproof uniform was a resource described in detail by many of the children; what it consisted of, the reasons for wearing it and the benefits of wearing waterproof clothing and wellies. Children also seemed to convey a sense of enjoyment from having to change into something to carry out FS activities, fuelling their imagination:

“There is like a jacket we’ve got. We normally wear wellies with them...I think all the time we do go to Forest School we probably always wear wellies.” [Child 5, 21-24]

“Yeah, we wear like these water protective clothes um, over our school uniform...with like a jacket and trousers...And wellies...I don’t mind wearing wellies I like them.”
[Child 1, 21-28]

“...getting all your wellies on and putting your trousers on and the coat on...waterproof gear. We change our socks as well... Just in case it’s raining you can still go out...because then you can kind of think what the rainforest is like with all the explorers out there.” [Child 3, 350-358]

During the focus group, parents also expressed their views that the uniforms added a different dimension for the pupils, indicating that their children enjoyed wearing them:

“...he/she also loves the suits that they wear [agreement from other parents] because I’ve seen them, saying “You look like Oompa Loompas”, “Oh no, they are really comfortable and you can’t get wet”...With [name of child] the suits and the wellies are almost like a superhero costume because he/she thinks no germs can hurt me.”
[Parent 4, 56-64]

“He/She likes the suits, I don’t know what it is but he/she thinks the suits are really cool and the wellies...” [Parent 2, 64-65]

4.4: Q2. What are parents’ perceptions of the Forest School initiative?

The data set included sections of the focus group that primarily focused on questions one to six that elicited parent’s perceptions of FS initiative. The focus group was analysed

leading to the identification of four main themes with eight sub-themes. These themes are presented below:

Table 9 – Parent's perceptions of the Forest School initiative

Main Themes	Sub-Themes
D. The classroom 'outside'	D1. Parents value the opportunity of Forest School
	D2. Importance of 'outdoors'
	D3. Computer age generation
E. Communication	E1. Transfer of children's understanding at home
F. Children 'undervalue' experience	F1. Parents perceive Forest School as 'the norm'
	F2. Surroundings taken for granted
G. Home	G1. Support from home
	G2. Parents' understanding of the Forest School initiative

4.4.1: D: The classroom 'outside'

The understanding of parents regarding FS was that it took place outside of the classroom. Parents expressed support for initiatives like FS that encouraged children to step outside and explore their surroundings. A second sub-theme seemed to communicate it was important for parents that their children were able to participate in an initiative that encourages exploration of different environments, particularly the outdoor environment. A third sub-theme was linked to parents' perceptions of their children growing up in a computer generation. Parents' seemed to express their concern for the amount of technology aimed at keeping children indoors.

4.4.2: D1: Parents value the opportunity of Forest School

The following parent expressed that their child experienced a sense of enjoyment from being able to take part in the FS initiative:

"I do know that he/she thoroughly enjoys it [Forest School] and he/she loves anything to do with the outdoors." [Parent 6, 79-80]

Another spoke about making learning fun and enjoyable for children. This parent suggests this may have a positive impact on her child's learning:

"If you can make it as fun and enjoyable for them in whatever context you can and make them want to learn then you are on the right track." [Parent 1, 249-250]

For one parent, FS appeared to act as a motivator for her child, it was interesting to note the term 'intimidating', possibly suggesting a more informal approach to learning suits this child:

"...my child hates school, it was something to get him/her here so he/she's more than willing to come on those days because it was taking him/her out of the classroom so he/she didn't have the intimidation of the classroom." [Parent 5, 24-26]

Interestingly, one parent commented that the understanding gained through FS could be seen as transferable to contexts outside school, possibly at home and through outdoor play.

"I think they know they can take that (understanding) outside of school and put it into another context as well." [Parent 3, 246-247]

Another parent spoke about the difference between their school experience and his child's current experience. There were a number of instances where parents made reference to not having opportunities like FS during their school days, more of these references can be found in sub-theme F1. p. 90. There seemed to be an appreciation and sense of value for the opportunities provided by initiatives like FS and the potential impact for children's education:

"It's nice to have the opportunity to give them those memories to do these things. We didn't do these things when we were in school. To give them those opportunities I think is brilliant and it can only add value to their education." [Parent 6, 317-320]

4.4.3: D2: Importance of ‘outdoors’

A number of parents conveyed a sense of FS taking the classroom ‘outside’. Of interest was parents’ construction of the word ‘classroom’ which implies a contradiction to a more informal, exploratory approach to learning of FS:

“My understanding is that it is taking the classroom outside...” [Parent 5, 22-23]

“...classroom outside...” [Parent 1, 2]

Parents appeared to appreciate the benefits for their children from being exposed to outdoor environments:

“...anything to do with outdoors, get them out of the house, in my eyes it’s fab, I can’t fault it.” [Parent 2, 116-117]

“anything that pushes them out, as [parent 1] said into a different environment has got to be a good thing.” [Parent 6, 120-121]

A number of parents felt that learning in an outdoor context may provide more stimulating experiences for children. Several examples of children being able to recall what they learned through FS activities were given by parents:

“Again, I think because it’s outdoors, doing nature it’s not like the equation of blah blah which they might think is boring. If you are outside and you say “How did you know that?” They will then go into depth about it.” [Parent 3, 332-334]

“I think my child is more likely to recall something in Forest School than what he/she did in class yesterday.” [Parent 6, 306-307]

4.4.4: D3: Computer age generation

This sub-theme relates to the extent that parents talked about the influence that technology can have over their children. There seemed to be an appreciation that initiatives like FS can help children to discover the world around them, both in school and, importantly for parents, at home. In one instance, a parent felt FS may help children to see there is more to being at home than using technology:

"I think where you have got children that are just constantly on computers or what have you this is good for them to think 'Oh yeah, there is more than in your bedroom on your Xbox' you know, to get out and about." [Parent 5, 44-47]

Another parent seemed to support the above viewpoint, commenting that initiatives like FS can help a child to experience the world outside rather than accessing games on a computer:

"... we went through an era a while back where children would go outside and they would say I'm bored. I can honestly say, whenever my children are in a field that they are never bored. They can find something, dig it, climb it, hold it, build it whatever. Whereas maybe this is a help because our children are still the generation of the computer and the telly, so there must be something good in this." [Parent 1, 339-344]

One parent appeared to acknowledge a generational change, emphasising the amount of technology currently available to children. It was suggested that initiatives such as FS could encourage children to explore environments outside:

"I think the problem that we've got as parents compared to our day when we were kids is the amount of technology that is available to kids now is designed to keep them indoors. So anything that pushes them out, as [parent 1] said into a different environment has got to be a good thing." [Parent 6, 115-118]

An example of how technology could be used in an indirect way to support and develop a child's interest in nature and the outdoors was provided by the following parent:

"I've been taking photographs and zooming right in and then put them on the computer and he/she's like 'There's hairs on the spider's legs' and he/she's fascinated by it..." [Parent 2, 113-115]

4.4.5: E: Communication

Within this main theme, parents suggested that communication played a significant role in their understanding of FS. Parents seemed to emphasise that they wanted to know about and understand how their children were getting on in school and what they had learned. The parents present seemed to offer different perspectives, with some children willing to

share and discuss their school day, and other children choosing not to. However, parents did indicate that if the context was appropriate, often outdoors, then the child could link his / her understanding back to what he / she had learned in school and through their FS experiences.

4.4.6: E1: Transfer of understanding at home

Parents spoke about the lack of information shared by their children when they were home from school. It could be suggested that these children wanted to separate school life from their home life:

"I only get little bits from my sons/daughters, it's very limited." [Parent 3, 8-9]

"My son/daughter doesn't tell me anything with school. I have to ask him/her every day "What did you do?" or I learn from other parents and they do say "Oh yeah, did [name of child] tell you about this today?" "No"..." [Parent 5, 37-39]

Although the same parent did comment that in the right context and possibly when the child wanted to share his / her understanding, his / her were able to relate this within the home environment:

"...but then he/she will drop it in to conversation sometimes saying "We've done that last week". I mean, we have a caravan in [name of place] and we are always down there and he/she is always into, you know, look at that because the back of the caravan backs onto a hedge and there is mice and there is birds and he/she is always saying "You can't touch that because that's" "How do you know that?" "Because we did that in Forest Schools"." [Parent 5, 39-45]

Another parent conveyed a different perspective for children's willingness to share what they had learned. It was suggested that as a family, discussions took place regarding what had been learned at school:

"In my house there are four children so when they came home they would be like "guess what we've done today" and there was quite a discussion about what they were sort of doing." [Parent 4, 14-16]

Another parent spoke about the positive impact that a child can experience when he / she is willing to share his / her knowledge and understanding at home:

"I think they quite like it when they are telling you something because they then become the teachers don't they and they think it's fantastic. For them to teach you something, well, sometimes my child is teaching me things and they think that's fab that I didn't know it." [Parent 5, 266-269]

This parent perceived FS as a means for parents to talk about school, and what children might have learned:

"As parents, it also gives us more opportunities to have conversations about how they know this and it's another enabler for us." [Parent 6, 329-330]

4.4.7: F: Children 'undervalue' experience

Within this main theme, two sub-themes were felt to underpin parents' perceptions of children failing to appreciate an initiative like FS. Firstly, FS seemed to be perceived as 'the norm' for children. Secondly, that children take their surroundings for granted.

Parents seemed to suggest that initiatives such as FS had become something that was accepted by their children as part of the school day. Within this sub-theme, some parents indicated that they did not have initiatives like FS when they were younger. In addition, a sense that children in today's society were privileged to have the opportunities afforded to them. Yet it seemed that parents could equally take their natural surroundings for granted.

4.4.8: F1: Parents perceive Forest School as 'the norm'

The parents seemed to perceive the FS initiative to be something that their children saw as being no different to other school subjects. Parents' perception could have been based on the fact that their children had experienced FS since nursery and accepted it as part of the school curriculum.

Some parents implied that, for their children, FS had become part of their everyday learning, something they had grown up with:

"It's just the norm for them [other parents agree – Yes]." [Parent 5, 153]

“Forest School is no different to them than Maths or PE now. It’s the norm.”

[Parent 2, 345-346]

A number of parents referred to their children as being ‘lucky’, recalling the lack of experiences they, as parents, received during their school days. This parent seemed to convey a sense that children accepted the experiences that FS provides as being part of school life, possibly taking it for granted:

“I always say “Do you realise how lucky you are?” because we just sat at a desk didn’t we and didn’t move and you know, I say “I wished my school was like this” but they don’t see it, to them it’s the norm.” [Parent 1, 209-211]

Another parent also used the term ‘lucky’ but seemed to appreciate the opportunity given to their child as he felt that initiatives like FS fostered and nurtured their child’s interest in the outdoor environment:

“By the children being lucky enough to be able to participate in something like that it is that opportunity to develop it and take it that stage further and to encourage the interest and keep it alive.” [Parent 6, 291-293]

One parent indicated that FS had helped their children to think about things from a different perspective, yet the initiative is not seen as different by children:

“It encouraged them to look at things differently I think. In everyday life, the majority of them are outdoor children but it’s not something that is different for them. So it encourages them to look at things differently...” [Parent 5, 282-284]

One child seemed to recognise that he would not get the opportunity to take part in FS activities at other schools in the area. This instance suggests that this child places a value in the kind of skills he is learning. This may contradict the parents’ perceptions that children accepted this type of activity as ‘the norm’:

“...I think the education of Forest School is good at the school to provide because they do teach us lots of things that we wouldn’t have in other schools. Like they

would teach us um, [pauses] um, well we should never do if we went camping or something like that. We should never touch the fire, we should never go near, we shouldn't be the one to light the fire." [Child 9, 151-155]

4.4.9: F2: Surroundings taken for granted

One parent perceived being able to have the opportunity to experience FS activities as a 'privilege':

"They don't see it as a privilege though ours." [Parent 1, 135]

Another parent seemed to value the opportunity, but also did not appear to think that children saw FS as a privilege:

"...I think that for them to be able to work outside in school is great but I think that they don't really realise that it is a privilege as such." [Parent 2, 144-146]

Parents spoke of their children having an appreciation of their surroundings, however, some also recognised that they as parents have also become accustomed to the natural environment within the local area:

"It's nice to know they [children] have an appreciation because I think sometimes because we live, sort of, in the country we take for granted the lovely views and all the greenery that we have around here." [Parent 4, 19-21]

"Yeah, but then we do take it for granted. If it's on your doorstep it becomes everyday then." [Parent 6, 156-157]

However, contrary to parents' perceptions of children taking things for granted, one child in particular, seemed aware that children may not get the chance to take part in FS activities at other schools in the area:

"I've had a good experience in um, Forest Schools and I probably wouldn't get that at like a different Primary school in this area because [names another Primary school] they haven't really got like a Forest School area like this because they have just got a yard. Like in [names his Primary school] um, we do have really good activities in

Forest School so I think I've had a good experience at Forest School." [Child 9, 506-510]

4.4.10: G: Home influence

As previously conveyed by the pupils in the main theme of Community, p. 81, there appeared to be a strong ethos within the school that supported the FS initiative. The influence of home also seemed to be an important factor when discussing the initiative with parents. However, as much as parents supported their children's learning at home by providing opportunities and experiences, their understanding of the rationale behind the initiative seemed to be lacking.

4.4.11: G1: Support from home

In a number of cases, parents seemed to support and encourage the use of the outdoor environment outside school. Some of the following quotes illustrated the value some families place on giving their children experiences outside a school context, through trips and places to stay:

"My parents live on a farm so my children get a great deal outside and creepy crawlies and nature and everything so to them it's great to get out of the classroom..." [Parent 1, 32-34]

"...I mean, we have a caravan in [name of place] and we are always down there..." [Parent 5, 41]

"We have got this place down in [name of place]. We will always go down to the beach or we are always doing this or that..." [Parent 2, 214-215]

"...my child is always with his grandfather, and he's always building things and he's there with his hammer, got his overalls on and he loves it." [Parent 2, 61-162]

This parent indicates that the ease of being able to talk about nature can facilitate discussions, regardless of age:

"With my family, because they are all different ages, they will have a group discussion about it. My youngest is in year one and if they are having a discussion

about nature, nature at any level is for everybody and it's something they can all appreciate." [Parent 4, 335-338]

When children were interviewed, in some cases, they reported that they are supported by their family at home:

"...I feel happy because I'm learning different stuff about nature. I do nature with Daddy and bird looking too." [Child 4, 240-241]

"I've got a ladybird a pet one in my house, I found it on the window sill... Yeah he's got two he's only two because if you count the spots on his back and there is two then he is that age he is...my Mam taught me that." [Child 6, 164-171]

4.4.12: G2: Parents' understanding of the Forest School initiative

Another sub-theme that developed was parents' understanding of the initiative, namely that they did not seem to be aware of the rationale underpinning the approach. Parents seemed to agree that their understanding of the initiative had largely come from their children.

This parent did not appear to think there was much difference between activities outside school and the FS approach and objectives:

"...I think that, you know, in school I think the only thing that is different is that they are given tasks to do." [Parent 2, 162-164]

Another referred to the fact that FS had been in place at the school for a number of years, yet the communication and rationale may not have been fully understood by parents when introduced:

"I think that from a parent's perspective, I remember when it came in years ago when my child was in Nursery I think, and my initial instinct was 'oh right, they are just giving up the classroom and they are allowed free time and no learning'." [Parent 1, 188-191]

In the early stages of the focus group, one parent sought clarification from the researcher as to what FS entailed:

"I was going to ask you what it was altogether..." [Parent 3, 8]

4.5: Q3. What potential influence can Forest School have on children's learning and development?

The data set included sections of the transcripts and focus group that primarily focused on questions eight and eleven from the children's interviews. It also included questions seven to ten from the focus group. Both of these sets of data elicited children's and parents' perceptions of the potential influence the FS initiative may have on learning and development. All transcripts were analysed leading to the identification of three main themes with six sub-themes. These themes are presented below:

Table 10 – Children’s and parents’ perceptions of how the Forest School initiative may affect learning and development

Main Themes	Sub-Themes
H. Learning	H1. Richness of experience
	H2. Key skills
	H3. Inside versus outside
	H4. Cross curricular opportunities
I. Child Development	I1. Maturity / awareness
	I2. Notion of safety

4.5.1: H: Learning

The third research question sought to explore children’s and parents’ perceptions of the FS initiative and its potential affect on children’s learning and development.

The theme of learning considers the perceptions of both the children interviewed and the views of parents from the focus group. Where it was felt areas related to learning were highlighted, quotes have been used from both sets of participants to emphasis each sub-theme. There are four sub-themes to be discussed within this main theme. The first sub-theme will discuss how the children conveyed a sense of richness to their outdoor learning experiences when involved in FS sessions. The second sub-theme focuses on the key skills described by children and parents. The third sub-theme explores the concept of children preferring to learn in an outdoor context versus an indoor context. The fourth and final sub-theme looks at how FS seems able to provide opportunities for cross-curricular work to take place.

4.5.2: H1: Richness of experience

This sub-theme explored children’s perceptions of the different types of learning experience. Of interest was the range, detail and level of recall that children were able to describe:

"Forest Schools is when you get dressed into the proper waterproof clothes and you go outside and try and explore the outdoors and have a look at all the different types of leaves and different types of objects and equipment and explore all the different types of trees and barks and different types of like feelings of the trees." [Child 5, 6-10]

"Some special occasions we normally, we do light a fire and have some smores up there as well....Smores which is where you get a marshmallow and then you roast it and then you put it between two chocolate biscuits... You get a stick, so you kneel back and then lean over to get it by putting it over the fire...[Class teacher's name] supplies us with the sticks..." [Child 5, 105-115]

One parent indicated that children benefited from rich learning experiences:

"It's exposure isn't it. Giving them the opportunity to explore different scenarios, different situations, so I certainly think it's beneficial." [Parent 6, 303-304]

One child spoke about never having seen a centipede, before whilst recalling their experience of hunting mini beasts:

"Um, sometimes we seen some insects that we hadn't seen before like. I never seen a centipede before Year 2 and I think we found a centipede and um, and we found worms and then we took pictures of them and um [class teacher's name] talked to us about what like the different flies were called and insects because she said like we found a common housefly um, and two other flies." [Child 9, 256-260]

One parent also spoke about how their child, who had little interest in the outdoors, was transfixed watching a rabbit for the first time and the powerful effect this had:

"My child isn't an outdoorsy type at all. He loves watching nature programmes on the television. The other day he was looking out of the window and he shouted 'Mam, come here quickly. Look there's a rabbit' and he was stood there watching three little rabbits and he said 'I've never seen a rabbit before' and he was there for about twenty minutes, he was rooted." [Parent 4, 231-236]

4.5.3: H2: Key skills

Practical skills – hands-on learning

The nature of FS activities involves a physical, hands-on approach to tasks. The kinaesthetic opportunities communicated by the children to explore and engage directly with the outdoor environment seem to provide a valuable learning experience.

Many of the tasks described by children focused on a hands-on approach to learning. The older children seemed to be able to recall their previous exploratory based activities, such as building habitats, shelters and pendants:

“We do like, in Forest Schools...like build things and um explore the area...We build like a habitat.” [Child 2, 118-121]

“Um, We’ve learned like all different types, how to build things with it as well...Like the little walkthrough, we’ve built that with bamboo sticks which was quite nice. We’ve built the little vegetable patch and fruit patches.” [Child 5, 232-236]

“...making the shelters. Um, we found some really like thick sticks um, and then we would put them where we want them and we could, and then we would like stick them into the ground to like keep them in place or if like we wanted to make like a chair we would get uh, a piece of a log with sticks connected to it with like string that we found um, and that activity taught us quite a lot of things to like survive.” [Child 9, 273-278]

Younger children conveyed a sense of exploration when taking part in FS activities:

“Hmm, we do find different things like that [points]...Acorns, stones and pinecones.” [Child 4, 101-103]

“Well, we can go and find creatures on there and I think we can go on the steps and I think we look for creatures on the wall.” [Child 6, 210-211]

Parents also seemed to appreciate the hands-on approach that FS offered, allowing children to experience things physically for themselves:

"I think with practical work you know you are outside and experimenting or doing whatever, you remember that." [Parent 2, 104-106]

"I think they like the practical side of it. If they are doing an experiment or building something they think that's great." [Parent 2, 158-159]

"[Parent 2] touched on it earlier, its more hands-on for them rather than the theory in the classroom." [Parent 6, 201-202]

Communication and listening skills

A recurring theme for all children when they were describing their experiences was the importance of communication. Each child interviewed was able to share their FS experiences clearly. Children spoke about the importance of the log circle and how it was central to communicating with each other:

"Well we just come down here [log circle] and sit down and talk about different stuff about Forest Schools...Like important stuff around here." [Child 4, 58-61]

"Our teacher would probably explain what we were about to do in the log circle and what we should do. When we have finished looking for our leaves and bark they would call us back and we would go back to the log circle...I think it's just talking about what we've collected and what we are about to do." [Child 5, 85-94]

[Talking about the log circle] "We've done talking, we've done stories, we've done finding." [Child 10, 205]

The ability to listen was also touched upon by the children interviewed. Younger children often spoke about an activity that they appeared to enjoy, which was sitting as a class on the log circle listening for birds and creatures:

"This is the log circle where we sit down and talk about and hear the sounds...Like birds and other creatures...Birds and uh, the like um other kind of names of birds... Yeah...[listens]...I heard one just then...It was coming from over there [points up in a tree]. There is a bird there [points to a bird]." [Child 6, 15-26]

One child felt that communicating his understanding was important and explained that if pupils were uncertain the class teacher would encourage children to ask for help:

"...we do normally have like talks on the log circle about what we are going to do and then um, [class teacher's name] always says if you don't understand just come and ask and I think that that's good because if we don't understand and what we don't really want to do, and what we want to do if we don't understand will...we won't really get any work done then but then if we know what we are doing we're going to know, we're going to get quite a lot of work done." [Child 9, 155-161]

Another child also indicated how they communicated with each other for group tasks:

"How to make a really good habitat and how to try and improve your outdoor skills and you could get better at your thinking skills your um, communication skills and a lot better at your communication skills...Because if there are no good places to do it you have got to try and use your imagination to build your own type of habitat out of all rubbish things and help make it a bit better...Because if you are working as a group you have got to communicate and talk to each other." [Child 3, 482-492]

Observational skills

Children's observational skills were demonstrated prior to the semi-structured interviews. All of the children pointed out numerous things of interest and importance for them in relation to FS. Some of the younger children were able to recognise a variety of very small insects and other objects of interest such as birds, trees, bird feeders, plants and vegetables:

"Snails because they are hidden and I watch them go into their shell." [Child 8, 58]

"That we can see birds in the air and we can see birds sometimes when we do Forest School like that one down by there and there is one in the bush...Because I just saw his head. He's walking in there." [Child 6, 301-304]

"...Sometimes I watched the spiders making their web." [Child 8, 174-175]

The following child appeared very aware of what surrounded her, expressed not just in what was communicated verbally but also in what was observed:

"This is logs this is because we saw a spider but it was tiny it was. Now it's gone. That was a mini one I think. Ooo look [points to a very small fly on the logs]. It's by there, I don't know where he is now. I think he's gone. No there he is." [Child 6, 124-126]

Older children also reported opportunities to develop their observational skills:

"I've learned like there's so many different types of leaves out there and when you look at the detail, um, like I thought leaves looked quite like the same but it's quite surprising how much you can do with leaves and different types..." [Child 5, 228-230]

"We've learned like how to look at stuff clearly, like we were looking at bugs and all that, like how, how old they are." [Child 1, 163-164]

Memory and recall

Many children were able to recall learning experiences recently and from a number of years ago. One child in particular spoke about how their peers help to keep not just good memories but also bad and funny experiences fresh. Children also touched on the importance of the context of experiences and how they are able to recall memories when placed within that environment:

"... probably the most exciting thing that we've done over here is when we like, it was the first time and I think it was like we were in nursery. And what we done we was like running around and stuff and this was really funny [smiles] because like you know that Christmas tree by there [points] and the pine tree my friend [child's name] she

ran um, with her eyes shut and she head butted it. Yeah, it was quite funny but then again it wasn't...I still remember like the bad things, the good things and like the funny things...Um, probably because um, all my friends are still talking about them now and I normally think of them when I come here and stuff." [Child 9, 120-134]

Some parents suggested that their children would remember something learned through FS more readily than through a more formal, classroom based approach:

"I think they will tell you, we have days when we can tour the school and stuff like that and we will go around and they will say "Well we did that", and that's something they might have done in year one and they will remember that we built those or even tell you that Year six built them and that might have been four or five years ago. They do very specifically remember." [Parent 2, 308-312]

"If we were to go home today and ask my child what he/she did in school last year he/she would say no. If he/she took me around the school then he/she would say "Oh yes, we did this and that" because he/she's outside, it's all coming back to him/her and you remember." [Parent 3, 313-316]

4.5.4: H3: Inside versus outside

Some children saw a distinction between learning inside and learning outside. Children appeared to appreciate the opportunity to be able to learn outside:

"I like it, I like that when we go out of the um class to do it...yeah, go outside to do it which is really fun. We get to go out and learn more about the wilderness"...It's not, It's not...it is as fun as being in the classroom I just like going outside a little bit better...because you get to learn more about the outside world...about how trees and plants grow and how animals make their habitats." [Child 2, 272-286]

"It's really fun and enjoyable [smiles] to go outside and outdoors to have a look over different types of leaves...because it's nice to go outside instead of inside all the time, so it's nice to go outside and have a look." [Child 5, 342-347]

One parent expressed a notion of children not being conscious of their learning as a result of being so involved in the outdoor environment, whereas children may be more aware of the learning process within a classroom setting:

“...I don’t think they are conscious that they are actually learning. In their classroom environment they are aware that they are learning so they either switch on or switch off whereas in the forest environment they will be learning because they are involving themselves.” [Parent 1, 239-242]

One child reported the word ‘stuck’ several times to describe being inside for both formal, classroom lessons and during break time. This child conveyed a perspective that the more academic lessons such as English and Maths are confined to the classroom but being outside was ‘fun’:

“I really like doing Forest Schools because it’s nice to go outside instead of being stuck in a classroom.” [Child 5, 183-184]

“...because even when it’s raining it’s still nice but like when it’s break time we can’t go out in the rain so...No, we can still go outside and do it...you get to do everything with what we do in school. Instead of just being stuck in a classroom and doing English and Maths we actually get to go outside and have a bit of fun.” [Child 5, 187-197]

One child spoke of learning outdoors as ‘different’ as they did not seem to perceive taking part in activities outside as work:

“When we get to go outside and play games outside and have fun outside...It’s different from in the classroom because you don’t like do work outside usually you do it in the classroom...we don’t like do, we’re not always out there with like our books and all that.” [Child 1, 108-115]

This child suggested that, for her, there was a balance of enjoyment between learning inside a class as well as outside. Other children also spoke about wanting a balance between the formal learning of a classroom and the informal, exploratory approach that an initiative such as Forest School can provide:

“...I like them both the same.” [Child 1, 122]

“Sometimes I like learning in the classroom sometimes I like learning outside.” [Child 8, 281-282]

4.5.5: H4: Cross curricular opportunities

The accounts given by children also describe that they have had the opportunity to do cross curricular activities when engaged with FS. The children mentioned art lessons in particular being focussed on within the outdoor space. Collecting leaves, drawing landscapes and leaf and tree scrapings were all reported by children:

“...once we got our art books and we drew a picture of a landscape.”
[Child 2, 475-476]

“My last activity in Forest Schools was um, going out to find two leaves and then drawing them in our Art books which was quite fun.” [Child 5, 58-59]

Reference was also made to science lessons that focused on building habitats in the FS area:

“Habitats, egg habitats...Um, We got loads of things from the outdoors. We didn’t use any string whatsoever, nothing handmade it was all made by the outdoors...We had to build a safe habitat for an egg...Yeah it was a real egg.” [Child 3, 213-220]

Younger children referred to the book ‘Going on a bear hunt’ and how it had been used for literacy and creative development:

“...well we was going on a bear hunt and we went through the trees. We was playing that we was [smiles].” [Child 6, 64-65]

“We had to go through the trees and look for birds we do. Then we had to go around then we had to go through the tunnel because we was looking all around and we had to go, we had to go through it because we had to go through the bear tunnel”. [Child 6, 327-330]

4.5.6: I: Child Development

The other aspect to the third research question looked to explore children's and parental perceptions of the FS initiative and its potential affect on children's development. The following sub-themes considered the perceptions of children and parents and highlight areas relating to child development that FS may effect. The first sub-theme focuses on maturity / awareness of children and how this may have been influenced by FS. The second sub-theme of the notion of safety explores how children referred to the need to keep themselves safe, keep nature safe and carry out activities safely.

4.5.7: I1: Maturity / awareness

A consistent theme running through the data suggests that the children who have experienced FS activities convey a sense of growing awareness and maturity. From the data, there is an impression of children seeing themselves as maturing and developing as they move through the school:

"...to be more cautious because all the Forest School area up there is like the forest and to like be a bit more cautious because like when I was little I would just run down any hill or something like that but now if my friends was down there I would find a different way round... Yeah, because like I know when I was in year two I just didn't think about anything I just did it but now I do think should I do it or should I not."

[Child 9, 496-503]

A parental perspective supplemented this growing awareness that some children communicated:

"I think that they are more aware. They will look at things slightly differently." [Parent 2, 213-214]

"Mine have always been aware of bugs but they are really, really aware of bugs now. They look at things and tell me what they are." [Parent 1, 270-271]

One parent seemed to contradict what they were saying regarding child development, stating that FS experiences had not changed her children but it had made them more aware:

"It encouraged them to look at things differently I think. In everyday life, the majority of them are outdoor children but it's not something that is different for them. So it encourages them to look at things differently, I don't think it's changed them as such because they are outdoors anyway but it has made them more aware of things. So they know what certain things is, rather than to think of it as a tree or a bug, they know that that tree is whatever and you know...a sycamore." [Parent 5, 284-288]

Through the semi-structured interviews, children were able to express this development through reflection and relate to how they have developed, matured and learned from their experiences:

"We've learned, I've learned about how things grow....Flowers, trees..." [Child 2, 435]

"Probably making stuff. Yeah like better strength with that mini little sword drill thing...Because I have made loads of stuff in Forest Schools. Like I've done the pendants, mini garden so it's like really good experience. I'm probably more careful so that I don't break stuff... Like break the string which is easy to break in pendant making or um...well it's just like from all the experience I've had I'm more stronger and knowing more stuff." [Child 7, 485-494]

Concepts of trust and responsibility were described by older children when sharing their experiences. One child spoke about the growing sense of freedom that is afforded to pupils as they get older, and another spoke about why trust plays an important part in the FS initiative:

"...we wasn't really allowed down the hill we could only go up on the top log circle." [Child 7, 421-422]

How does that feel if you can go to more places now you are older? [Researcher, 425]

"Well I do just feel like I've got freedom...Like I can go wherever I want as long as I let the teacher know." [Child 7, 421-428]

"Um, yeah because you need to be trusted on Forest Schools because um, if like you was naughty you could go out of the gates and go home or something like that

because the gates I think they are still open when school is like this and plus um, if we went out and [class teacher's name] couldn't find us she could be really worried."
[Child 9, 235-239]

One parent suggested that the outdoor learning environment had been of particular benefit for their child and they could see a difference with age:

"I think for my child as well, they're a child that doesn't like to sit still for very long. So for them, particularly something like this enforces [reinforces] their learning ability and they are getting better as they have got older." [Parent 1, 294-296]

4.5.8: I2: Notion of safety

A consistent theme which children regularly referred to was the notion of being safe. This encompassed three facets, keeping themselves safe, keeping nature safe, and carrying out activities in a safe manner.

All children interviewed had an understanding of specific rules and routines when involved in FS. An appreciation of their awareness of why these rules and routines were important was also noticeable. The majority of children interviewed talked about the need to keep themselves safe:

"To be safe and don't wander off...Because you might get lost or fall over...You need to be safe and careful...In case you like slip and hurt yourself." [Child 2, 197-203]

"This is another part of the slope. Down there I don't think that that is really safe because of children coming around here because if they slip through that they would hit the steps." [Child 3, 148-150]

Children were able to discuss and demonstrate the appropriate way of entering the log circle and all described how they pretended there was a fire in the middle:

"...that's the fire so we have got to step over the log to get off and on...All you do is step over there and then sit down...It was probably the first time we done Forest Schools in Year [gives two Infant Year groups] I think." [Child 7, 71-81]

Children's awareness of keeping nature safe is highlighted in theme B1. One child talked about a paired activity building a habitat and how a beetle had come into the area where they were working. So as not to disturb nature, they decided to move their activity to another place:

"We did actually see a beetle so I did have to go like that [gestures] take all the things away so the beetle climbed up the tree." [Child 3, 248-249]

Children were also able to talk about the need to carry out activities safely. Many of these rules were related to safety at the log circles and imagining there was a fire:

"They are like logs to make sure that we don't go too close to the fire so we aren't allowed over those logs... Yeah, because especially if it was lit you could get easily burned by going over those logs." [Child 7, 118-123]

"When we have the fire [class teacher's name] says don't go over this line so we can't go over the line and that's just to tell the children not to go over that part." [Child 3, 166-168]

"We are not allowed to go through the middle because we pretend there is a fire...Because of safety reasons because if someone is naughty or something they could go right through the middle." [Child 5, 96-100]

Children also described how they were supervised when using tools and resources for specific activities and how they supported their peers for learning tasks:

"No we worked in partners so there was two people to each group and we had one odd one out so they had three people which made it easier for them...Because one could get all the things the other could find another really good place for an egg and then if the two went off to get some more wood it would be easier for the person working on the habitat to get it done quicker and they would have lots more ideas from the brainstorming." [Child 3, 222-228]

"Well no we had this like round log thing like a little chunk of wood. Then we do [inaudible] and drilled a hole...with a mini drill thing it was...it's like just a normal one , one handle and like the end of it is like a drill and you just turn it...[Name of class teacher and support assistant] helped us." [Child 7, 242-252]

One younger child spoke about the need to stay with their peers when involved in FS tasks:

"...we will have a partner and we will be nice to them and find different things with them and we are not allowed to go without them." [Child 4, 174-175]

Chapter 5 – Discussion

5.1: Introduction

In this chapter, the findings will be discussed with reference to links with existing literature and previous research mentioned in the literature review. The structure of the discussion shall follow the format set out in chapter four, Findings. Each main theme will be used as a title, with the sub-themes discussed accordingly within each section. Following the discussion of the findings, the methodological limitations are considered.

5.2: A: Feelings

How children felt about FS was a powerful theme emanating from the interviews. Children seemed honest, open and genuine when describing their thoughts and feelings towards the initiative. The majority of opinions were deemed to be positive in favour of the initiative and the opportunities it brought pupils in their learning and social interactions seemed to be conveyed with enthusiasm. The FS initiative appeared to be a real source of enjoyment for the children who were interviewed.

5.2.1: A1: Positive feelings

Previously, Seligman (2002) argued that positive emotions broaden attention, which can make someone more aware of their physical and social environment. Subsequently, positive emotions afford chances to create stronger relationships and be more productive. In this study, children expressed a range of positive feelings that were related to the FS initiative, the activities and the opportunities to work with friends. Carr (2004) postulates that positive emotions facilitate creative, tolerant thinking and productivity. Although this study cannot confirm these claims, it is the view of this study that, the positive emotions elicited by children towards FS would place children in a favourable position when learning opportunities arose. In addition, Fredrickson's (1998) 'broaden-and-build' theory also concurs with Seligman's position. The broadened mindset related with positive emotions can facilitate creative and flexible thinking, as well as effective problem solving and coping skills. Kellert's symbolic value (2002), nature as a source of language and imagination, would link with Fredrickson's theory.

5.2.2: A2: Negative feelings

Seligman (2002) also noted that negative emotions can narrow attention and produce a fight or flight response. However, negative feelings were not directly expressed in relation to the FS initiative. Negative feelings were reported when children mentioned a fear of something or that they were scared of spiders or wasps. When feelings of disappointment and frustration were conveyed, they were due to having to stop an activity because of another child's behaviour or when they felt they had made a mistake. A number of children responded positively when asked a question looking for a negative perspective, suggesting that children were able to feel comfortable offering their own thoughts and ideas, instead of responding to what they felt was a 'correct' response.

5.2.3: A3: Fun and enjoyment

It could be suggested that children see FS as something fun and enjoyable, as something different that provides them with opportunities to learn in a context different from the norm, contrary to some of the parental views. Children may not have specifically mentioned the word 'special' but through the analysis there is a suggestion that there was a 'uniqueness' to how FS was being implemented within the school, which could well be central to its apparent success. Previously, the study reported the views of children and young people by Nicol et al. on page 22 (2007). This was in relation to children's positive perceptions of education and learning outdoors. The four areas highlighted by Nicol et al. (2007) in relation to fun and enjoyable; novelty; allowing children and young people to feel uninhibited and close to nature through practical activities, encounters with animals and exposure to the weather and ones which gave the participants opportunities to set their own agenda and to work at their own pace will be considered in the light of the sub-themes identified in this study. The first area of note is 'fun and enjoyable', children in this study seemed to agree with this notion as it was conveyed strongly in the analysis.

Most children reported that they looked forward to FS before attending and continued to enjoy it across the age range interviewed. Enjoyment is a major factor in motivation. Intrinsic motivation plays a large part in Carlton and Winsler's (1998) notion that young children have a general and innate need to master their environment. Children interviewed gave a strong impression that they were aware of the FS environment, suggesting the best areas to work in and where to avoid in terms of danger.

5.3: B: Outdoor experience

This is an area that would require further investigation, to establish whether FS had a direct impact on children's knowledge and awareness of the outdoors or, whether it is a result of other factors. One thing that was clear from the findings was that the children in this school had developed a strong appreciation of their surroundings.

5.3.1: B1: Appreciation of surroundings

The findings seem to suggest that children taking part in the FS initiative from an early age feel a responsibility to look after their environment and the creatures that live there, which develops as they develop through the school. Kellert's aesthetic value, physical attraction and appeal of nature, could be applied in this context given the information reported by children and parents. Kellert (2002) asserts that contact with the natural environment occupies a surprisingly important place in a child's emotional responsiveness and receptivity. During the interviews, the small number of children conveyed their receptiveness to their natural surroundings. The moralistic value could also be applied, ethical and spiritual relation to nature, given children talked about keeping nature safe and respecting the environment.

5.4: C: Community

The ethos of the setting may have had a bearing on what children and parents communicated. This should be viewed as an acknowledgement that the children interviewed in this study consciously or unconsciously conveyed a very powerful sense of ownership and community. This is in keeping with the NEF (2003) study, where it was reported that pupils demonstrated visible ownership and pride. Parents also communicated that their children were able to recall with great accuracy who had built what in the FS area. Children communicated that they had a strong relationship with their surroundings and developed a sense of community within their school and school grounds. Rickinson et al. (2004) concluded that when outdoor learning took place in the participant's school grounds or community it resulted in "greater confidence, renewed pride in community, stronger motivation towards learning and a greater sense of belonging and responsibility" (p. 6). As children move through the school it could be suggested that their emotional understanding develops. As noted previously (p. 10), Murray and O'Brien (2005) believe that, as a result of children being able to attend FS sessions regularly over a period of time, their confidence is enhanced. The authors assert that this in turn

encourages ownership of the outdoor space and the relationship each child can have with the outdoor environment. The more familiar and confident children become within the FS setting, the greater the likelihood of a more positive attitude towards their surroundings and learning. If children are afforded the opportunity to be a part of the FS experience year in year out, further study would be needed to attempt to pin point what impact this could have, when compared to children who may only experience the initiative up to a certain age.

5.4.1: C1: Whole school approach

The 'Skills framework for 3 to 19 year olds in Wales' (WAG, 2008c), advocates a whole-school approach is crucial so there is a shared and coherent vision across the school. Within this setting, a systemic togetherness appears to have encouraged a genuine sense of pride and ownership of the FS area and the school. Through children's comments, they appeared to feel they were contributing to the development of their school environment. Children spoke of their understanding and awareness of work other year groups had undertaken. Parents also endorsed this view, suggesting that their children could specifically remember who was involved in making certain projects and how long ago it was.

5.4.2: C2: Resources

The notion of children utilising resources such as waterproof clothing, practical tools and the outdoor environment plays an important part in providing children with a range of learning opportunities. For children to be able to experience these opportunities in all weather conditions seems to remove any potential barriers to being able to learn in an outdoor environment. The school in this study has invested in the FS initiative in terms of resources (wellies, waterproofs, binoculars, charts to identify trees, IT equipment, development of the grounds, willow tunnels, a bug hotel to house wood, wood circles, tree planting, a butterfly garden, a hedgehog hut and bird feeders). All of which can provide hands on, practical experiences which form a key component of experiential learning (Kolb, 1984). Two members of school staff are also fully trained as level three FS leaders. This requires investment and time given by school and commitment on the part of the teachers involved. It would appear the school have made a commitment to making the FS initiative work and that has been reflected in the enthusiasm of the children interviewed and the positive feedback provided by parents. The outdoor environment is easily accessible and opportunities are provided for the whole school to access the outdoor environment regularly. The availability of two log circles, one for infants and one for

juniors, means that two classes could go out at the same time. This would give teachers the opportunity to be flexible to curriculum areas and teach outside when it is felt appropriate. Having immediate access to high quality resources could supplement the meaningful learning experiences that children described.

5.5: D: The classroom 'outside'

Parents seemed aware that FS sessions took place in a different context outside the classroom. However, parent's use of the term 'classroom' outside could be interpreted as having restrictions for children within an outdoor context. Learning in an outdoor environment without walls could be a difficult concept for parents, especially if they themselves did not experience this type of opportunity.

5.5.1: D1: Parents value the opportunity of Forest School

There appeared to be an appreciation and sense of value for the opportunities provided by initiatives like FS and the potential impact for children's education. As stated by Lovell (2010) 82% of people agreed that woodlands are good places for children to learn about the outdoors, with 48% agreeing that woodlands provide places for learning. All parents involved in the study by Griffiths et al. (2010) suggested they would recommend the initiative to other families. Although parents were not explicitly asked this question, there seemed to be an appreciation from parents that they valued the opportunity their children were given to learn in a tactile, hands-on way. This would suggest that parents feel practical, experiential learning experiences are important for their children (Kolb, 1984). Parents spoke of their children's enjoyment and suggested that FS could have a positive impact. Further research would be needed to clarify how much children's enjoyment comes from FS or other factors such as experiencing the activities with peers. It was interesting to note that FS seemed to act as a motivator for some children in that it was perhaps an approach that they felt suited them better than a formal classroom environment. Parents seemed to convey a sense of wishing they had been able to take part in these types of initiatives when they were of school age. Perhaps parents were seeing the FS approach as something they themselves would have liked to have been a part of. Parents appeared to be providing their children with opportunities outside of school to enhance their children's learning experiences, possibly in ways they themselves did not experience.

5.5.2: D2: Importance of 'outdoors'

Chawla (1994) asserts that parents need to be educated about what the natural world can offer. However, parents seemed to appreciate the benefits that outdoor environments could offer their children. Although parents' construction of the term 'classroom' outside appeared an interesting one, and perhaps at odds with the relative freedom that FS may offer, what seemed evident was that children should have opportunities to play and learn outside. A naturalistic approach appears central when involved with the FS initiative. Children experience a range of hands-on natural phenomena such as fire, earth, wood and creatures. Children seem to be encouraged to use their senses to appreciate nature. Chawla (1988) argues that natural environments can have an impact on the development of children's sensitivity and caring attitudes towards nature and augment their environmental knowledge and understanding. Kellert (2002) asserts that there is evidence to suggest that experiential contact with nature can exert a significant impact on cognitive development. Although the data from this study cannot confirm Kellert's assertion, it could be argued that the children interviewed conveyed sensitivity, respect, awareness and showed elements of understanding about nature which would support Chawla's notion and Kellert's scientific value.

5.5.3: D3: Computer age generation

Computer games may encourage children to draw on skills such as exploring their environment and staying safe. Yet, these very skills and motivations, for some children, could be seen as, a 'Nature Deficit Disorder' coined by Louv (2005). This label is used to describe a generation of children and young people who are becoming increasingly detached from their physical and social reality. The advances in technology may support Louv's claim and some of the parents in this study also reflected on the negative impact technology can have for children. However, parents seemed to imply that initiatives such as FS could be used positively to encourage children to discover and experience the world outside. Conversely, one parent gave an example of how technology could be used to enhance children's interests in nature. It would appear that more children than ever have unparalleled access to nature through technology. From a positive viewpoint this is providing children with far greater means to experience natural settings and wildlife. In spite of this perspective, Pyle (2002) argues that vicarious experiences with nature via technology can never provide the challenge, immersion, intimacy, discovery, creativity, adventure and surprise that can be afforded through direct experience.

5.6: E: Communication

The parents present seemed to offer different perspectives, with some saying their children were willing to share and discuss their school day, whilst other children were not. Parents made reference to children explaining their understanding of nature or their environment within particular contexts. This may suggest that the learning taking place for children through the FS initiative could be committed to their long term memory, maybe due to the 'unique' experiences FS can provide. It would also suggest that children are able to transfer and use their knowledge and understanding in other contexts. For example, children's experience within the context of an outdoor environment could be channelled just as easily in a classroom based setting. Piaget's (1971) theory of assimilation and accommodation explains how, through experience and repetition, a learner adapts and accommodates new information so that it can be applied seamlessly in different contexts.

5.6.1: E1: Transfer of understanding at home

Parents reported that communication played a significant role in their understanding of FS, although this seemed variable, with some children sharing information and others appearing to want to separate home from school. Parents did note that their children would often share their knowledge that related to FS within an outdoor context, namely when they saw something or were involved in an activity that seemed to spark a memory. This information was conveyed as happening in a spontaneous way and not when children were asked more directly about what they had done in FS that day. As mentioned previously, the experience and ways in which children learn through FS may have been deepened through assimilation and accommodation. Therefore, children are able to apply their understanding across different contexts. Parents did seem to value the FS initiative for giving them another way to engage their children in discussion, instead of simply asking about more routine day to day subjects.

5.7: F: Children 'undervalue' experience

Parents implied that initiatives such as FS had become something that was accepted by their children as part of the school day. There were a number of instances where parents made reference to not having opportunities like FS during their school days and children were 'lucky' to have such opportunities.

5.7.1: F1: Parents perceive Forest School as ‘the norm’

Parents conveyed that the FS initiative was something that their children saw as being no different to other school subjects, suggesting it had been embedded and something children had grown up with. This did not appear to be the case from the perspective of children. The second area reported in the study of Nicol et al. (2007) is novelty which would support the perspective of children. Information from the children interviewed suggested that the lessons and activities they experienced through FS were novel and perhaps different to their normal school lessons and activities. This implies that FS has the potential to promote valued learning experiences by introducing novelty into the children’s learning environment.

5.7.2: F2: Surroundings taken for granted

Murray and O’Brien (2005) believe that FS can support children to develop greater respect and interest for the environment and their natural surroundings. The authors see FS as a vehicle that can stimulate curiosity, exploration and observation. Parents seemed to convey that having opportunities to be a part of FS was a privilege, and one that their children perhaps did not appreciate. Parents spoke of their children taking their locality and the areas in the school for granted. Yet they also acknowledged that they themselves could just as easily become complacent with the natural areas, parks, forests and hills that surrounded them. The research by Sobel (1993) and Pretty et al. (2009) proposing a place-based curriculum fostering empathy for the familiar, opportunities for exploration and engaging within local communities could be pertinent if this perspective was found to be valid. However, it must also be recognised that the perspective given is a parental one and may not be shared by their children.

5.8: G: Home influence

Griffiths et al. (2010) reported that parents identified significant developments in their children as a result of participation in FS, spending more time outdoors and an increase in their knowledge of the environment. From analysing the perspective of a small number of parents, data would suggest that parental opinions were very positive regarding the FS initiative and how it can benefit their children’s learning. Although parents may not have suggested that FS plays a significant part in their children’s development, opinions seemed to imply that this style of learning and the approach of being around nature could only have benefits for children. Parents discussed how FS had helped to develop children’s interest, enthusiasm, skills, and helped them to develop greater awareness of

their surroundings and make their children better learners. Parents also spoke about how FS could be used as a vehicle to discuss the school day and for children to share their new found understanding. This would be consistent with the findings of Griffiths et al. (2010) who reported a ripple effect at home as a result of children taking part in FS. Although this cannot be qualified, parents seemed to provide a range of opportunities outside school that would dovetail neatly with the ideals of FS.

5.8.1: G1: Support from home

In a number of cases, parents seemed to support and encourage the use of the outdoor environment outside school. Feinstein et al. (2008) stress the importance of a home that can provide rich learning experiences with parents actively involved in their children's education. The significance of such support at this stage in children's development would seem vital. Parents spoke enthusiastically about the opportunities afforded to their children outside of school. Desforges and Abouchaar (2003) assert that parental involvement and the home learning environment can be crucial for children's academic success during primary school years.

5.8.2: G2: Parents' understanding of Forest School

Murray and O'Brien (2005) state it is important that parents and teachers are involved from the beginning of FS in order to gain an understanding of what the initiative entails. The small group of parents interviewed seemed to express that they did not seem to be aware of the rationale underpinning the approach. The study by Griffiths et al. (2010) also suggested that the lines of communication between school and home could be improved. Parents seemed to agree that their understanding of the initiative had largely come from their children. The parents who attended did not have a child below year three. It is the understanding of this study that parents and children who enter the nursery receive information that underpins the FS initiative. Perhaps this is an area where better communication links could be established, however, it would be unwise to generalise the findings from such a small group of participants.

5.9: H: Learning

'Hands-on' experiential learning has traditionally been seen as an important aspect of early childhood education. Early years pioneers, such as Froebel (Lawrence, 1952) and Montessori (Kramer, 1974), believed that direct experiences of nature enhanced children's learning and development. The findings from this study concur with the notions of Froebel

(1952) and Montessori (1974) relating to the impact direct experiences of nature can have on children's learning and development. However, this impact may not only be restricted to early years children and could, if given the opportunity, continue to have an impact for children up to the ages of ten and eleven (Erikson, 1974; Sobel, 1996; Kellert, 2002). It would not be appropriate to surmise whether this potential impact would continue for children and young people past these ages, as they have not been considered.

Rushton and Larkin (2001) state that children learn best when in a rich, stimulating environment. They construct meaning from real life applications; the probability of learning is greater when all the senses are used simultaneously. Waite et al. (2006b) also suggest that through FS all children's senses are engaged through their outdoor experiences. This would imply children's sensory experience can also be enhanced through the FS initiative, which could lead to a greater probability of learning.

5.9.1: Psychological theories relating to learning

The unique environment in which FS takes place seems to allow children a freedom which is not often the case within the four walls of a classroom. It would be interesting, through more longitudinal research, to compare the FS approach to more formal, classroom based learning and focus on how memorable children find their learning experiences and what it is that makes it memorable. The developed outdoor environment in the setting studied, appears to provide an ideal context to support many areas of the curriculum and support children's development (Piaget, 1954; Vygotsky 1978). Children's key skills such as, practical skills, observational skills, listening skills and communication skills appear to be influenced by being in and around a natural setting. Children are given the space to explore, experience and develop. As much as these opportunities, experiences and skills can be developed through a more formal, classroom setting, an argument could be made where FS could provide experiences that make developing and honing these skills more memorable. The relationships formed with adults and peers through small group work and the exploratory nature of the tasks would lend itself to Kellert's aesthetic value and Vygotsky's theories of scaffolding (1978). Children appear to have opportunities to bond with nature and, perhaps in this case, with the adults and peers around them.

The exploratory nature of FS and the interaction between the learner and their environment seems to provide tangible learning experiences which pupils can recall from a number of years previous. Perhaps the Von Restorff effect (1933) could be used to

describe why children are able to recall specific incidents. However, given the richness of children's descriptions, it would seem that children have been able to remember large chunks of information as opposed to specific incidents or activities. This data would be consistent with Waite, Davis and Brown (2006) who state that children interviewed about FS sessions were able to recall past memories. The authors believed that their findings showed children were actively involved cognitively, emotionally and physically when participating in FS activities. Kolb (1984) and Rogers (1983) both propose the need for individuals to take part actively in the learning process. It could be argued that learning situations involving activity can have a less predictable outcome than more formal, classroom based learning. In a classroom, it is the teacher who controls the learning situation in terms of outcomes, process and pupil involvement. When children are actively involved in an outdoor learning situation, it could be argued that there can be less prediction of outcome and structure because each individual participating will experience the activity and environment in different ways. This could lead to a sense of discovery which has the potential to heighten curiosity, enjoyment levels and the richness of the experience. It is the position of this study that FS has the potential to involve children in these ways, but more rigorous research needs to be conducted to endorse this claim.

The fourth area reported by the study of Nicol et al. (2007) refers to experiences which gave the participants opportunities to set their own agenda and to work at their own pace. Links for both these experiences can be found in the Foundation Phase curriculum (WAG, 2008). Through constant and repeated contact with the FS area, children seem able to acquire knowledge of the natural environment around them. Much of the children's learning was conveyed as being child-initiated with adults supporting, facilitating and scaffolding the learning experiences (Vygotsky, 1978).

Children communicated that they seem highly involved and engaged in their learning, through a two-way process between children, with teachers and adults as facilitators. Skills and understanding can be developed and shared; collaboration and team work appear important. As mentioned previously, both Vygotsky (1978) and Bruner (1996) emphasise the role of the adult to co-construct learning and development, this lends itself to Johnson and Johnson's (2003) view "the challenge in teaching is not covering the material for the students, it is uncovering the material with the students" (p. 492).

The very nature of FS lends itself to a hands-on approach to many tasks (Kolb, 1984). Kellert, (2002) advocates that the opportunities to explore and engage directly with the outdoor environment provide a unique learning experience. Providing children with these opportunities in school could be seen as pivotal for their overall development, as their opportunities outside school may be influenced by a number of factors such as family, financial constraints, technology or the area that they live in. Sobel (1996); Pretty et al. (2008); Kellert (2002) and Erikson (1974) believe that middle childhood is vital for providing children with opportunities to explore the world around them. When interviewed, the tasks described by children focused on an experiential approach to learning, exploring the environment and developing key skills. Children were not simply confined to direct contact with nature, but also had indirect and vicarious experiences, using a number of different resources to support their activities, such as binoculars, cameras, charts and magnifying glasses. Kellert's utilitarian and dominionistic values (2002) would link with using nature as a source of material and feeling a mastery and control of nature.

The way in which children described some of the activities they had undertaken as part of the FS initiative indicates that the exploratory and sensory nature of the activities seems memorable and engaging for participants (Chawla, 1988). The kinaesthetic opportunities offered also appear to be different from other school activities and the hands-on approach (Kolb, 1984) seems to be enjoyable and powerful for children.

5.9.2: H1: Richness of experience

The richness of experiences provided by the FS initiative appears to give children the opportunity to embed their learning experiences within their consciousness. Many of the children were able to articulate, with a great deal of detail commensurate to their ability, experiences which were new to them that FS had enabled. The detail and enthusiasm with which children relayed these experiences suggests that activities considered fun, enjoyable and rich in experience have been committed to their long term memory. The WAG document composed by Funky Dragon (2007) suggested that in response to UNCRC article 29 relating to education, only 18% of children reported that they enjoy the learning aspect of school and highlight a lack of variation and interest in their lessons.

5.9.3: H2: Key skills

WAG (2008) stipulates that the curriculum in Wales should "focus on the learner; focus on continuity and progression 3 to 19; ensuring that appropriate skills development is woven throughout the curriculum and offering reduced subject content with an increased focus on

skills” (p. 3). FS in this setting would appear to be offering the type of curriculum that WAG is striving for.

It would seem that giving children the opportunity to sit and listen to the world around them provided a very powerful learning experience (Claxton, 1997; Kabat-Zinn, 2005).

Conversely this could be viewed as difficult to afford due to the time pressures and curriculum demands placed on teachers. Experiencing this activity within the confines of a classroom or school building, it could be argued, would not have the same level of impact. The children’s acute sense of hearing, which some demonstrated, appeared to be targeted and developed through utilising the outdoor environment (Chawla 1988). This could be of benefit when working more formally within a classroom setting. As previously mentioned, Claxton and Carr (2004) agree that positive learning responses can develop into other contexts. The ‘Skills framework for 3 to 19 year olds in Wales’ (WAG, 2008c) was created to help schools plan the development of transferable generic skills for learners aged 3 to 19 and underpin the revised curriculum. It would appear that the FS initiative has the potential to support and develop many key skills for children and young people.

5.9.4: H3: Inside versus outside

Despite the sense of enjoyment from being able to learn about the outdoors by having first-hand experience, it would seem that not all children wanted all their learning to take place in this way. Some children reported that they enjoyed a balance of both the classroom and outdoor environment. For children, the FS approach may not feel like learning and perhaps the change in environment, change in approach from the teacher and / or the nature of the activities presented allowed children to feel more comfortable (Vygotsky, 1978). However, as Maynard (2003) noted, there is a need for caution when making claims of the affect on children’s self-esteem and their positive emotions in one context. Even though children reported strong indicators of fun and enjoyment; that is not to say that they do not equally have the same feelings towards learning within the classroom environment.

5.9.5: H4: Cross curricular opportunities

FS appears to have the potential to be used in all subjects to greatly enrich learning experiences for children and provide different contexts in which to learn. Murray and O’Brien (2005) believe that FS is designed to complement the school curriculum and build on skills learned in the classroom, to help develop the learner as a whole. “Children are encouraged to develop their innate curiosity and motivation to learn” (p. 5). On the one

hand, Murray and O'Brien suggest FS can complement the school curriculum, but perhaps an argument could be made for a curriculum to be delivered using FS as the vehicle. Perhaps the cross-curricular opportunities available through FS are only restricted by the pedagogy and creativity of the adults running the sessions and the structure of the current curriculum.

5.10: I: Child Development

A key theme of Erikson's psychosocial theory of development (1963) refers to life as a quest for identity. According to Erikson, ego identity constantly changes due to new experience and information we acquire in our daily interactions with others. In addition to ego identity, Erikson also believed that a sense of competence also motivates behaviours and actions. Although this study is small scale in nature, the analysis suggests that it is possible that the children involved in the FS initiative have developed due to the new experiences and information they have learned. However, it could also be argued that children's development could equally be attributed to individual maturation. The sense of competence expressed by children could be explained through an active theory approach to learn, reinforce and refine their experiences through experiential learning (Kolb, 1984; Johnson & Johnson, 2003). This may have allowed children to develop a greater sense of self, which has developed aspects of their emotional wellbeing (Bandura, 1997). This would be commensurate with other studies that have evaluated the FS initiative and the potential psychological benefits it can have for children (Murray & O'Brien, 2005; Davis & Waite, 2003). Aspects of children's development that were evident in the analysis shall now be considered in turn.

5.10.1: I1: Maturity

This study is unable to quantify whether FS has had a direct effect on children's level of maturity. However, it is possible to suggest that the way in which FS seems to be embedded at a whole school level may be a contributing factor to children's developing sense of maturity. The third area reported by the study of Nicol et al. (2007) refers to experiences which allow children and young people to feel uninhibited, free and close to nature. This is done through practical activities, encounters with animals and exposure to the weather, which are seen as highly valued experiences. Older children spoke of their growing sense of freedom as they progressed through the school, bringing increased responsibility. The practical activities, knowledge and understanding of animals, insects

and wildlife were conveyed by all children. Kellert's scientific value (2002), knowledge and understanding of nature, would appear to have resonated with the children interviewed.

Previous studies, such as Murray and O'Brien (2005) and Swarbrick et al. (2004) have asserted that FS aims to enhance children's self-confidence, whether or not they feel they can do something. According to Bandura (1997), individuals who have a strong belief in their capabilities view complicated tasks as challenges rather than threats. They are more likely to show interest and become immersed in these tasks, set challenging goals, try harder, persist for longer and are more resilient in recovering from disappointment. Within this school setting, FS appears to provide a range of opportunities for children to develop and enhance their self-confidence through hands-on experiential learning. For Bandura, mastery of experience is the most effective way of developing a strong sense of self-efficacy, which is seen as an important developmental aspect of middle childhood (Sobel, 1996; Pretty et al. 2008; Kellert, 2002 and Erikson, 1974). Children gave the impression they were able to make decisions for themselves, such as where to look, what to touch, what to listen for, what to avoid, suggesting that they seemed to perceive themselves as independent, inquisitive learners (WAG, 2008). It is the view of this study that children's interpersonal skills, communication, self-esteem and emotional and behavioural development have the potential to be supported through FS.

5.10.2: I2: Notion of safety

Trust is a crucial aspect of FS. Knight (2011) suggests that a triangle of trust, respect and reliance is essential between practitioners, participants and the natural environment. Knight believes that this triangle can support emotional growth and development, not just for the children participating, but also for the adult practitioners. For trust to build, it would seem important that FS sessions are repeated over time. The desired outcomes are to create long term benefits for children. In order to achieve this, opportunities need to be repeated and reinforce learning experiences. From the interviews with children and focus group with parents, there is a sense that, from an early age, children are given opportunities to explore their environment in small groups. This can offer advantages for developing self-esteem, social skills (Jenner & Hughes, 2006) and self-efficacy (Bandura, 1971).

If experiences for all children are to be positive ones, then trust is a vital component, not just when building fires, but also when allowing children to explore and learn experientially

at their own pace. The setting where the research has taken place is fortunate that it does not need to build up the layers of trust needed if an external FS practitioner worked with the school. The school have two members of staff fully trained to run sessions at both infant and junior level and these members of staff were referred to regularly by all children when describing their experiences.

Children were able to remember and recall routines and safety when discussing FS. This understanding could lead to a wider appreciation and awareness of risks, which is potentially why children were highly safety conscious. Children also communicated that if they were to take risks they conveyed they had an understanding of the potential consequences of their actions. This could be deemed a negativistic value, as children learn to assess risks and manage nature. Dweck (2000), Stephenson (2003) and Greenfield (2004) all suggest that risk can have positive implications for children's developmental needs. Making shelters, bird watching, mini-beast hunts, cooking smores were all popular activities: keeping safe and being careful was conveyed regularly by all pupils interviewed. It could be argued that this concept is a construction that has been imposed on children by adults because of the growing concern regarding health and safety issues. As stated previously, Gill (2007) proposes a philosophy of resilience that seeks a balance between protecting children from genuine threats and giving them rich, challenging opportunities through which to learn. The results of this study seem to suggest that there may be a dichotomy for school staff between providing opportunities that offer sufficient risk and being aware of the safety concerns. The current study is unsure whether the balance between risk and safety is equal given the way in which children communicated the safety aspect of FS to a greater extent in comparison with risk taking activities.

Lamb (2011) reported that children participating in FS were far more investigative and imaginative in their approach and more willing to take risks with their learning. Stephenson (2003) asserted that recognising levels of risk that are appropriate and acceptable also requires an active challenge to develop children's confidence in their own ability. It could be postulated that the children interviewed might perhaps take risks with their learning, but are less likely to take physical risks themselves.

5.11: Limitations

5.11.1: The sample

When the proposal for the study was submitted, the views of parents were hoped to be explored in more depth. Due to the timescales and lack of parental response, only one focus group took place. The benefit of a pilot focus group could have ensured the suitability of the interview questions and provided the researcher with experience at facilitating a focus group. The difference in age range of participants did not appear to inhibit responses in any way. Also, the flow between the initial meeting of individual pupils and subsequent semi-structured interview helped to establish and develop rapport that allowed participants to respond honestly.

It was not possible to gain the perspective of children who attended year two due to a lack of parental response. This was unfortunate, as these children would have been at the end of the Foundation Phase curriculum and may have been able to provide alternative perspectives to the ones given.

This study used a small number of participants and this has consequences for what can be implicated from the findings. However, Ritchie and Lewis (2003) state that one of the key elements that makes qualitative research distinct is that the sample sizes are small in scale and are specifically selected on the basis of relevant criteria. A larger and more diverse representative sample could be beneficial in future studies. Given the exploratory nature of the data, the use of a qualitative approach, semi-structured interviews and a focus group, broad generalisations of these findings to other schools taking part in the FS initiative should be cautiously made. As became evident when locating a school that fulfilled the methodological criteria, each school within a LA runs the FS initiative in their own unique way. The consistency, resources and pedagogy between schools may be very different which makes generalisations inappropriate.

From the outset, the focus was to collect data from just one school setting. The perspectives obtained from children in this study may not be indicative of opinions of children who participate in FS in other settings. Also, other children interviewed within the chosen school may have provided different responses. As FS is underpinned by a set of guiding principles (section 2.2.2, p. 10 to 13), it would mean that each setting adopts the

initiative in numerous ways, leading to many variables being inconsistent when looking to compare approaches with other settings.

5.11.2: Response bias

Robson (2002) states that response bias can range from obstructiveness and withholding information to when a participant attempts to provide the answers they think the researcher is looking for. A reflexive approach was adopted for all aspects of the process, stating relative positions from the outset and considering personal value systems and areas of subjectivity.

Cohen, Manion and Lawrence (2000) identify some of the potential difficulties when interviewing children, such as establishing trust, finding ways to move beyond the responses a child thinks the interviewer wants to hear and aiming questions at an appropriate level. As much as possible, the above difficulties have tried to be overcome by following Robson's (2002) suggestions: meeting children prior to the interview; conducting pilot interviews to provide an opportunity to practise interview technique and trialling the interview schedule to evaluate its feasibility.

Self-selection bias has the potential to arise when individuals opt themselves into a research program. Individuals who are interested in a particular topic or who have very positive or negative experiences of that topic could be more likely to participate in a study in order to share their views. It is possible that children and parents with positive or negative views on the FS initiative may have been more likely to participate in the study and potentially introduce this bias. Equally, individuals who have an apathetic view may be less likely to participate as they do not feel they have a strong enough view on the subject. Moreover, views held by children or parents that are perceived to be unacceptable may not have been articulated because of emotional connotations.

5.11.3: Skills of researcher

Semi structured interviews and focus groups can be highly dependent on the skills of the interviewer. Key factors in the perceived success of an interview are considered to be developing a good rapport with the individual or group of participants and the listening and questioning skills needed to elicit an appropriate and relevant response. It could be argued that the relative inexperience of the researcher at conducting interviews in this manner may have led to opportunities for exploring responses and developing them being missed. However, the semi-structured interview did provide a large amount of interesting data.

5.11.4: Data collection

Although the third research question relates to children's and parents' perceptions as to how the FS initiative can affect learning and development, this study has found this question difficult to qualify. If the study were to have followed a group over a period of time, then a baseline measure of their level of learning could have been taken pre- and post-initiative. This could have ensured a more robust discussion to be presented with regard to the FS initiatives impact on children's learning. However, this would have led to the research paradigm changing to a mixed methods approach, which would have required a re-submission for ethical approval. With regard to children's development, again, because the nature of this research was opportunistic, no baseline measures were collected to be able to quantify whether children's development had been affected by their involvement in the FS initiative or whether this was due to other factors.

5.11.5: Context

The setting for conducting the interviews was not consistent or always familiar to children. The majority of participants, six, were interviewed in the school staff room with the other four being interviewed on the log circle in the school grounds. It was possible that the six children may not have responded in the same way if they were interviewed in a more familiar and child friendly place within the school, although, the researcher was mindful to establish a rapport prior to the semi-structured interview by encouraging each pupil to take their time and show what he / she wished. The four remaining children were interviewed on the log circle and although this did seem to put them very much at ease, their attention and responses may have been affected by what they noticed and remembered in the environment around them. The data collection period took place in the final few weeks of a summer term. This is a particularly busy time for schools and pupils may not have been as actively engaged at this time in the school year.

5.11.6: Analysis

It was considered beneficial to transcribe and analyse the data first hand so the immersion in the data set could be fully appreciated. The use of specialist software, such as NVivo, was not used during the analysis, as it was considered a time consuming process to become proficient in the use of the software. Due to the 'active involvement' of the researcher in the process of thematic analysis, Willig (2001) states that it is inevitable another individual could interpret the same data in a completely different way. When considering the analysis of qualitative data, a major criticism is that a large quantity of the data is lost and with this a sense of the individuality of participants' voice. Making informed

decisions regarding which data extracts are selected that are representative of the views is left to interpretation. As has already been stated, generalising the findings to other contexts should only be carried out with extreme caution.

Chapter 6 – Conclusion

6.1: Introduction

This chapter will first consider the relevant theories that have guided the study, before giving a brief summary of the overall findings. Ideas for future research will be postulated followed by the implications of the current study for education and educational psychology practice.

6.2: Theories guiding the research

Johnson and Johnson (2003) state that “Experiential learning is a procedure based on the systematic development and modification of action theories” (p. 49). This active form of learning is considered to be a corner stone of the FS initiative. It would seem children are provided with opportunities to investigate and explore their surroundings through rich learning experiences. The hands-on, practical nature of the tasks can provide heightened sensory experiences that seem to allow children to trial their action theories and learn from their experiences.

FS seems able to provide the different environments described by Kolb’s cycle (1984); affective, perceptual and behavioural. Kolb believed that these different learning situations can promote different skills such as problem solving, creativity and developing action research. Although these were not observed directly, the way in which the children conveyed their experiences through FS implies these skills can be enhanced. Children were able to refer to a range of skills that can be learned and developed through the FS initiative.

The role of the adult to co-construct learning and development was emphasised by both Vygotsky (1978) and Bruner (1996). They saw children’s development as a dynamic process, involving reciprocal exchanges, people and settings that can transform the child, who in turn affects the people and settings around them, which further reshapes the child in an endless progression. It appears the FS setting has the potential to provide support to enhance children’s learning and development. At this stage, further research is necessary to qualify just how much of a difference the initiative can make. It is the view of this study that child-led learning experiences that are facilitated by adults can provide powerful

learning experiences for children. However, it is also important to provide children with opportunities to learn experientially for themselves, as individuals to develop their awareness of risk and develop their resilience (Stephenson, 2003; & Greenfield, 2004).

Kellert (2002) claims that experiential contact with nature can exert a significant impact on cognitive development. Although this claim cannot be certified by this research, it is the view of this study that positive, child-led experiences in a natural setting could have benefits for a child's cognitive development. Kellert also claims that contact with the natural environment occupies a surprisingly important place in a child's emotional responsiveness and receptivity. From the analysis of the data, there is a suggestion that children viewed their FS environment with genuine care and affection which is consistent with Palmer's (1998) findings. The nine values of nature that Kellert refers to (p. 40) could be linked to the guiding principles of FS, outlined at the beginning of this study, section 2.2.2, p. 10 to 13. Further research would be necessary to quantify these links.

In the introduction to this study, a quote by Kahn and Kellert (2002) was given "It would not be too bold to assert that direct and indirect experience of nature has been and may possibly remain a critical component in human physical, emotional, intellectual, and even moral development" (p. vii). This study has taken tentative steps to explore perceptions of one type of outdoor learning initiative, FS. It would appear that the natural environment has the potential to have a positive influence on children's learning and development. However, before Kahn and Kellert's bold statement can be justified, far more research is needed into the pedagogy, approach and psychological benefits of initiatives like FS to justify their claims.

6.3: Summary of overall findings

6.3.1: Q1. What are children's perceptions of the Forest School initiative?

Children expressed many thoughts about the FS initiative. Words such as "happy", "excited" and "friendly" were used to describe how they felt when involved in FS activities. Children communicated the fun, excitement and enjoyment they had experienced both verbally and non-verbally when talking about FS as an initiative. Out of the ten children interviewed, every child commented on how much they enjoyed the FS approach. Children also conveyed a caring attitude and respect for nature and the outdoor environment and

that it was important for them to look after their surroundings. The children interviewed expressed a powerful sense of ownership and community for their school and the FS setting, with the wealth of resources available adding to a rich experience.

6.3.2: Q2. What are parents' perceptions of the Forest School initiative?

Parents expressed that they valued the initiative and were supportive of the potential impact that FS could have on their children's education. Parents seemed to convey a sense of wishing they had been able to take part in an initiative such as FS when they were younger. Parents seemed to appreciate the benefits that outdoor environments could offer their children. However, the small group of parents interviewed seemed to express that they did not seem to be aware of the rationale underpinning the approach.

The parents seemed to offer different perspectives in relation to how much information their children passed on to them. Some children seemed willing to share and discuss their school day, yet other children chose not to. Parents conveyed that the FS initiative was something that their children saw as being no different to other school subjects, implying it had been embedded within the school. A concern for parents seemed to revolve around the increase in the availability of technology for children. However, parents seemed to imply that initiatives such as FS could be used positively to encourage children to discover and experience their environment outside the family home. In a number of cases, parents seemed to support and encourage the use of the outdoor environment outside school.

6.3.3: Q3. What potential influence can Forest School have on children's learning and development?

The FS initiative has the potential to influence children's learning and development in a number of ways. With regard to children's learning, a key theme related to the richness of experiences provided by the FS initiative, which appears to give children the opportunity to embed their learning experiences. The FS experience seems to enable children to develop and reinforce a multitude of key skills, all within a stimulating, sensory environment. Some children referred to a preference for learning in an outdoor environment, however, this was balanced by other pupils suggesting they enjoyed a combination of a classroom approach coupled with FS learning experiences. Children also made reference to how a range of subjects had been incorporated into the FS approach.

With regard to children's development, participants referred to a growing sense of awareness and maturity. However, this may be attributed to the children growing older and

not directly to the influence of FS. Older children also described concepts of trust and responsibility with reference made to a growing sense of freedom being afforded to pupils as they got older. All children interviewed demonstrated an understanding of specific rules and routines when involved in a FS activity and why this was important to keep themselves safe and carry out activities safely.

6.4: Enhancing children's experiences

This study shares the views of Lewis and Lindsey (2002) in that researching children's perspectives is both a fascinating and rewarding task. It is an area that appears under developed but one vital in ensuring children's voices are heard, especially with respect to their schooling. Conducting research into children's and parents' perspectives with regard to the FS initiative has provided further evidence, from those directly involved, that if employed whole heartedly FS has the potential to enhance children's experiences of the natural world. It would be too bold to assert that FS has affected children's learning and development.

The concept of safety is an important one for children, parents, education and society. Although FS advocates taking risks within a controlled environment (Knight, 2009, Fitzgibbon, 2011), children in this study expressed awareness for safety and being careful. Societal issues appear to make the balance between risk and safety difficult for children. However, for children to develop and increase their resilience they would require challenging opportunities in which to learn. Balancing risk and safety is challenging for parents and teachers, but perhaps adopting an approach where children are encouraged to take risks within a safe environment is needed to allow children to learn and develop (Stephenson, 2003; Greenfield, 2004).

The FS initiative appears to provide positive outdoor learning opportunities. FS dovetails with the Foundation Phase curriculum in Wales by addressing developmental needs and fostering key skills that are adaptable both indoor and in outdoor environments. That is not to say that the FS initiative is only suited to children between the ages of three and seven years old. The importance of middle childhood explored previously (Erikson, 1968; Sobel, 1993; Kellert, 2002) may suggest that this stage of development is just as important as the years preceding. It is the view of this study that continuing the FS initiative throughout KS2, into middle childhood, could enrich children's development and provide opportunities

to continue to explore, assimilate and accommodate new information as they mature. The findings suggest that the learning opportunities, experiences and skills that FS seems to support, would be just as beneficial during the middle phase of childhood as they are during the early phase.

Claxton (2008) states:

We need a new narrative for education that can engage and inspire children and their families. Let us fire kids up with the deep satisfaction of discovery and exploration. They are born with learning zeal; let us recognise, celebrate and protect it, but also stretch, strengthen and diversify it. (p. 194).

FS may be a means to deliver Claxton's narrative and further enhance children's learning and development.

6.5: Future Research

The following suggestions have been made with educational professionals in mind to carry out further research into the FS initiative and its potential impact. Firstly, it may be useful to explore how aware EPs, and other professionals who regularly work with children in schools, are regarding the potential impact of FS. A wider study may wish to explore awareness of outdoor education, similar to that of Rickinson et al. (2004). Given the psychological benefits proposed by previous studies and, to an extent, replicated in this study with regard to FS, it is claimed this would be an important exercise in establishing which professionals are aware of the existence of FS.

Secondly, further exploration focusing on the difference in FS experiences between the Foundation Phase and KS2 could provide interesting results. If there are continued benefits for children who take part in FS at KS2, it could have implications for policy makers and LAs about increasing this type of provision for children aged seven to eleven.

Thirdly, although the study was conceived by an adult, when exploring children's views it may be worth considering carrying out research that is child-led. Involving children from the outset of a piece of research might uncover new perspectives and different ways of approaching data collection. However, adults involved in this type of research would need to ensure children were supported and guided to guarantee greater reliability and validity.

Finally, it would be interesting to conduct research to investigate the potential impact FS can have directly on learning. This approach could possibly compare experiences of formal classroom based learning with FS experiences using control groups, or using a form of standardised assessment pre- and post-involvement with FS. This may help to ascertain measurable effects that FS could have on children's learning.

6.6: Implications for education

The WAG (2008b) 'Making the most of learning: Implementing the revised curriculum' states:

The fundamental aim of education is to produce learners who are motivated and effective, increasingly responsible for their own learning, able to make full use of the new technologies and who will be able to learn and apply new skills effectively throughout their lives, whether in school, the workplace or at home (p. 14.)

Given the WAG alongside the Forestry Commission Wales have published a document relating to FS (2010), it would appear that the approach of FS closely matches the fundamental aims set out in the WAG's legislation. Therefore, the potential to have an effect on children's learning and development could be expanded across the whole primary phase, not just at a Foundation Phase level.

Primary schools face significant challenges in the context of national targets and the pressures these put on the school day. The tensions between reaching targets and social learning can be uncomfortable ones, particularly for teachers who believe their role is to develop the whole child. Though these assessment pressures may make outdoor learning opportunities appear more difficult at KS2, it could be argued that outdoor learning has become even more important to schools, when teachers may have less time in the traditional school day to establish effective, informal relationships with pupils.

A question that could be posed to head teachers is why does it seem outdoor education is tending to be offered only to young children within the Foundation Phase curriculum? Especially when Kellert (2002), Erikson (1996) and Sobel (1993) suggest middle childhood is such a key period in children's learning and development. O'Donnell et al. (2006) reported that more than 92% of head teachers viewed outdoor education as having a number of positive benefits:

- broadening pupils' experiences;
- the school ethos;
- pupil's attitudes and values;
- pupil's communication and social skills;
- pupil's behaviour and motivation.

This study has highlighted that each of these areas has been spoken about by children and parents, at times with great enthusiasm. Yet, the published research highlights that FS is primarily delivered to pupils aged between three and seven. It is the view of this study that children in KS2 within this context reported benefits in their learning and development from FS just as much as younger children. It is worth bearing in mind that within one LA, no primary schools were found where the FS initiative was being implemented at a whole school level. In another LA, only two were deemed to be adopting a whole school approach. Perhaps this study will raise some much needed awareness for LAs and head teachers, espousing the view that an initiative such as FS could provide an outdoor learning experience for all primary aged ages.

6.7: Implications for the practice of educational psychologists

In the introduction, the study referred to the notion proposed by Miller et al. (2008) that critical qualitative research methodologies can allow educational psychologists to:

- grapple with contests between knowledge and experience;
- overcome barriers between research and practice;
- better equip the practitioner to work with children and young people.

This study aimed to inform these critical issues. In the first instance, the specific methodology employed in this study has shown that by allowing children and parents to voice their perceptions and experiences, they can enlighten us as to their thoughts. This can allow EPs to gain a better understanding between children's knowledge and understanding and their experiences.

Secondly, adopting a formal approach in the methodology, by using semi-structured interviews, demonstrated that exploring children's views can be explored in depth, whilst

ensuring a rich description is achieved. The challenge for EPs is to have the courage to make the time to put such methods into practice.

A very important feature in the ethical guidelines for this study was obtaining informed consent from children and parents. This allowed value and richness to be added to the data set. As the research was focused on the views expressed by children, it was essential that, even though parents had given their consent, all children involved were asked their permission to take part. Consent is an integral part of working as an EP and this study has highlighted the value and richness of doing so.

As discussed previously, it is also the view of this study that awareness of initiatives like FS, that have psychological links to mindfulness (Kabat-Zinn, 2005) resilience (Elkind, 2007), emotional literacy (Burton, 2008) should be known to EPs who in turn could be asking schools whether they are currently involved in the implementation of the FS initiative. FS appears to offer a holistic, inclusive approach which has potential benefits for children and young people of all ages, not just pupils with SEN.

Another implication for EPs, which follows on from the above suggestion, relates to staff training. Members of staff being trained in the FS approach could be given some background to psychological theory in relation to the importance of the developmental stages for children (Piaget, 1971; Erikson, 1983); emotional well-being (Burton, 2008); Vygotsky's Zone of Proximal Development (1978) and potentially raising awareness of the effect of nature through the work of Kellert (2002) and Sobel (1993).

However, an EP would seem best placed to provide IN Service Training (INSET) to all members of staff, outlining the rationale behind initiatives such as FS and the potential psychological benefits they can offer children. Indeed, an example given by a child in this study where children sit and listen to the world around them has strong links with mindfulness (Kabat-Zinn, 2005), for example, see page 113/114. Perhaps there is an argument to suggest EPs could also lead group work with staff members and children as to the benefits of mindfulness. As mentioned previously, Claxton (1997) asserts that sitting quietly and pondering a situation can enhance creative thought, yet the pressure of time is often a barrier. It would seem INSET could provide an opportunity for EPs to enthuse and

empower school staff at a systemic level purporting the psychology underpinning outdoor learning. This in turn could be transferred to developing pedagogy for approaching initiatives like FS so that it can be adapted to suit the children in their school.

In conclusion, this study has highlighted that FS, if implemented in the correct way by all school staff, has the potential to benefit children's learning. However, further study would need to take place to ascertain whether children's development is affected. Perhaps courage is needed from head teachers, school staff and parents to embrace the outside world with the same enthusiasm, curiosity and energy as children. The school where this study has taken place would appear to have shown these qualities and the children who took part were able to convey an enthusiasm for the FS initiative.

Must we always teach our children with books? Let them look at the stars and the mountains above. Let them look at the waters and the trees and flowers on Earth. Then they will begin to think, and to think is the beginning of a real education. (Polis – date unknown)

References

- Adams, P. (2006). Exploring social constructivism: Theories and practicalities. *Education 3-13*, 3(34), 243-57.
- Arksey, H., & Knight, P.T. (1999). *Interviewing for Social Scientists*, London: Sage.
- Arnstein, S. (1969). A ladder of participation. *Journal of American Institute of Planners*, 35, 216-224.
- Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative research* 1, 385-405.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Barbour, R. (2007). *Doing focus groups* (Book 4 of the SAGE Qualitative Research Kit). London: Sage.
- Berger, K.S. (1988). *The developing person through the life span* (2nd ed.). New York: Worth Publishers Ltd.
- Billington, T. (2006). *Working with children: Assessment, representation and intervention*. London: Sage.
- Bitou, A., & Waller, T. (2011). Researching the rights of children under three years old to participate in the curriculum in early years' education and care. In D. Harcourt, B. Perry and T. Waller (Eds.), *Young children's perspectives: Debating the ethics and dilemmas of educational research with children* (pp. 52-67). Abingdon: Routledge Falmer.
- Bixler, R.D., Floyd, M.F., & Hammitt, W.E. (2002). Environmental socialization. Quantitative tests of the childhood play hypothesis. *Environment and Behaviour* 34, 795-818.
- Bjorkland, D.F., Dukes, C., & Brown, R.D. (2009). The development of memory strategies. In M.L. Courage & N. Cowan (Eds.) *The development of memory in infancy and childhood* (2nd ed.). (pp. 145-175). New York: Psychology Press.
- Bloom, B.S., Engelhart, M.B., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1956). *Taxonomy of educational objectives, Handbook 1: The classification of educational goals – Cognitive domain*. New York: Longman.
- Bogardus, E. (1926). The group interview. *Journal of Applied Sociology*, 10, 372-82.
- Borradaile, L. (2006). *Forest school Scotland: An evaluation*, Report to forestry commission Scotland and Forest Education Initiative Scotland.

- Boyatzis, R.E. (1998). *Transforming qualitative information: thematic analysis and code development*. London: Sage.
- Bransford, J.D., Brown, A.L., & Cocking, R.R. (2000). *How people learn: Brain, mind, experience, and school*. Washington, D.C: National Academy Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3, 77-101.
- Bridgewater College. (2004). *Forest School – 10 years of leading the way*
- British Psychological Society (BPS). (2009). *Code of ethics and conduct*. Leicester: BPS.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513-531.
- Bruner, J. (1978). The role of dialogue in language acquisition. In A. Sinclair, R.J. Jarvella, and W. J. M. Levelt (Eds.), *The child's conception of language* (pp. 241–256). New York: Springer-Verlag.
- Bruner, J. (1996). *The culture of education*. Cambridge Mass: Harvard University Press.
- Burden, R. (1996). Meaningful questions or meaningless answers: Worthwhile assessment in a changing world. In S. Krieger & P. Engelbrecht (Eds.), *Perspectives on learning difficulties* (pp. 152-175). Hatfield, SA: Van Schaik.
- Burton, S. (2008). Empowering learning support assistants to enhance the emotional wellbeing of children in school. *Educational & Child Psychology*, 25(2), 40 – 56.
- Businessballs (2012). Retrieved November 2012 from the following website: <http://www.businessballs.com/consciouscompetencelearningmodel.htm>
- Campbell, C., Gillborn, D., Lunt, I., Sammons, P., Vincent, C., Warren, S., & Whitty, G. (2002). Strategies and issues for inclusive schooling. In C. Campbell (Ed.), *Developing inclusive schooling: Perspectives, policies and practices* (pp. 150-165). London: Institute of Education-Bedford Ways.
- Cardiff University (2011). *Doctorate in Educational Psychology Professional Training Programme Teaching and Learning Handbook*. Cardiff University.
- Carlton, M.P., & Winsler, A. (1998). Fostering intrinsic motivation in early childhood classrooms. *Early Childhood Education Journal*, 25(3), 159-166.
- Carr, A. (2004). *Positive psychology: The science of happiness and human strength*. New York: Brunner-Routledge.
- Central Advisory Council for Education (1967). *Children and their primary schools 'The Plowden Report'*, London: HMSO.
- Chawla, L. (1988). Children's concern for the natural environment, *Children's Environments Quarterly*, 5(3), 13-20.

- Chawla, L. (1990). Ecstatic places, *Children's Environments Quarterly*, 7(4), 18-23.
- Chawla, L. (1994). *In the first country of places: Nature, poetry and childhood memory*. Albany, New York: State University of New York Press.
- Clark, A. (2004). The Mosaic Approach and Research with Young Children. In V. Lewis, M. Kellet, C. Robinson, S. Fraser, & S. Ding, (Eds.), *The Reality of Research with Children and Young People* (pp. 142-156). London: Sage.
- Clark, A., & Moss, P. (2001). *Listening to young children: The mosaic approach*. London: National Children's Bureau for the Joseph Rowntree Foundation.
- Clark, A., & Moss, P. (2005). *Spaces to play. More listening to young children using the mosaic approach*. London: National Children's Bureau.
- Clark, A., & Statham, J. (2005). Listening to young children – Experts in their own lives. *Adoption and Fostering*, 29(1), 45-56.
- Claxton, G. (1997). *Hare brain / tortoise mind: How intelligence increases when you think less*. New York: Harper-Collins.
- Claxton, G. (2008). *What's the point of school? Rediscovering the heart of education*. Oneworld Publications: Oxford.
- Claxton, G. & Carr, M. (2004). A framework for teaching: the dynamics of disposition. *Early Years*, 24(1), 87-96.
- Cohen, L., Manion, L., & Lawrence, K. (2000). *Research methods in education*. London: Routledge Falmer.
- Cowan, N., & Alloway, T. (2009). Development of working memory in childhood. In M.L.Courage & N. Cowan (Eds.). *The development of memory in infancy and childhood* (2nd ed.). (pp.303-342). New York: Psychology Press.
- Cunningham, P. (1983). Helping students to extract meaning from experience. In R. Smith & J. Bass (Eds.), *Helping adults to learn how to learn: New directions for continuing education* (pp. 57-69). San Francisco.
- Davis, J. (1998). Young children, environmental education, and the future. *Early Childhood Education Journal*, 26(2), 117-123.
- Davis, J., Watson, N., & Cunningham-Burley, S. (2000). Learning the lives of disabled children: Developing a reflexive approach. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices* (pp. 201-224). London: Falmer-Press.
- Davis, B., & Waite, S. (2005). *An evaluation of the opportunities and challenges in early years*. Final report, report for funding body EYDCP (zero14plus) and participants.
- Davis, B., Rea, T., & Waite, S. (2006). The special nature of outdoors: Its contribution to the education of children aged 3-11. *Australian Journal of Outdoor Education*, 10(2), 3-12.

Davis-Kean, P.E., Jager, J., & Collins, A.W. (2009). The self in action: An emerging link between self-beliefs and behaviours in middle childhood. *Child Development Perspectives*, 3, 184-188.

Dent, R.J., & Cameron, R.J.S. (2003). Developing resilience in children who are in public care: The educational psychology perspective. *Educational Psychology in Practice*, 19, 3-19.

Denzin, N. K. (1970). *The Research Act in Sociology*. Chicago: Aldine.

Department for Education and Employment (DfEE) (2000). *Educational psychology services: Current role, good practice and future directions*. Report of the working group. London: DfEE.

Department of Health (1989). *The Children Act*. London: HMSO.

Desforges, C. & Abouchaar, A. (2003). *The impact of parental involvement, parental support and family education on pupil achievement and adjustment: A literature review*. Research Report 433. London: DfES Publications.

Drew, P. (2008). Conversation Analysis. In J.A.Smith, (Ed.), *Qualitative psychology: A practical guide to research methods* (2nd ed.). (pp. 133-159). London: Sage.

Dweck, C. (2000). *Self-theories: their role in motivation, personality and development*. Hove: Psychology Press.

Economics and Statistics (2009). *UK public opinion of forestry 2009 - Data tables*. Edinburgh Forestry Commission.

Elkind, D. (2007). *The power of play: How imaginative, spontaneous activities lead to healthier and happier children*. Cambridge: Da Capo Lifelong Books.

Elliot, S., & Davis, J. (2004). Mud pies and daisy chains: connecting young children and nature. *Every Child*, 10(4), 4-5.

Elmes, D.G., Kantowitz, Z.H., & Roediger, H.L. (1995). *Research methods in psychology* (5th ed.). St. Paul: West Publications Company.

Erikson, E.H. (1963). *Childhood and Society* (2nd ed.). New York: Norton.

Erikson, E.H. (1968). *Identity: Youth and crisis*. New York: Norton.

Erikson, E.H. (1980). *Identity and the Life Cycle*. New York: Norton.

Fajerman, L., & Treseder, P. (2004). *Children are service users too: A guide to consulting with children and young people*. London: Save the Children.

Fallon, K., Woods, K., & Rooney, S. (2010). A discussion of the developing role of educational psychologists within Children's Services. *Educational Psychology in Practice*, 26(1), 1-23.

- Feinstein, L., Duckworth, K., & Sabates, R. (2008). *Education and the family: Passing success across the generations*. New York: Routledge.
- Fitzgibbon, S. L. (2011). *The impact of forest school in Wales on one class of children with Autism*. University of Wales, Newport: Unpublished Masters thesis.
- Forestry Commission Wales (2010). *A guide to Forest School in Wales*. Ceredigion: Forest Research.
- Fredrickson, B. L. (1998). What good are positive emotions. *Review of General Psychology*, 2(3), 300-319.
- Frith, H., & Gleeson, K. (2004). Clothing and embodiment: men managing body image and appearance. *Psychology of Men and Masculinity*, 5, 40-48.
- Future Foundation. (2006). *The changing face of parenting: Professional parenting, information and healthcare*. London: Future Foundation.
- Gair, N.P. (1997). *Outdoor education: Theory and practice*. London: Cassell.
- Gardener, H. (1983). *Multiple intelligences*. New York: Basic Books.
- Gardener, H. (2000). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books.
- Gersch, I. (1996). Involving the child in assessment: Creating a listening ethos. *Educational and Child Psychology*, 13(2), 31-40.
- Gill, T. (2007). *No Fear: Growing up in a risk averse society*. London: Calouste Gulbenkian Foundation.
- Glasser, B. (1992). *Basics of grounded theory analysis*. Sociology Press.
- Greenfield, C. (2004). I can run, play on bikes, jump the zoom slide, and play on the swings: Exploring the value of outdoor play. *Australian Journal of Early Childhood*, 29(2), 1-5.
- Griffiths, E., Elniff-Larsen, A., & Jones, L. (2010). *An evaluation of the Ysgol Llanfair Forest School*. A report by Wavehill and Angles Consulting for Forestry Commission Wales.
- Halford, G.S., & Andrews, G. (2006). Reasoning and problem solving. *Handbook of child psychology. Cognition, perception, and language*, 2, 557-608.
- Hammersley, M (1992). *What's wrong with ethnography? Methodological explorations*. London: Routledge.
- Harding, E., & Atkinson, C. (2009). How EPs record the voice of the child, *Educational Psychology in Practice*, 25(2), 125-137.

- Hart, R.A. (1995). The right to play and children's participation. In H. Shier (Ed.), *The Article 31 Action Pack*. Camden Social Services.
- Hoyt, K.A., & Acredolo, L.P. (1992). How do childhood experiences influence environmental attitude formation? In P.H. Kahn & S.R. Kellert (Eds.), *Children and nature: Psychological, sociocultural and evolutionary investigations* (pp. 29-63). London: MIT.
- Huston, A.C., & Ripke, M.N. (2006). Middle childhood: Contexts of development. In A.C. Huston & M.N. Ripke (Eds.), *Developmental contexts in middle childhood: Bridges to adolescence and adulthood* (pp. 1-22). New York: Cambridge University Press.
- Isen, A. (2000). Positive affect and decision making. In M. Lewis & J. Haviland Jones, (Eds.), *Handbook of Emotions* (2nd ed.) (pp. 417-36). New York: Guilford.
- Jenner, L., & Hughes, F. (2006). *An evaluation of a forest school project: Pentre forest school*. Forestry Commission Wales.
- Jenson, J.M., & Fraser, M.W. (2006). *Social policy for children and families: A risk and resilience perspective*. Thousand Oaks, CA: Sage.
- Johnson, D.W., & Johnson, F.P. (2003). *Joining together. Group theory and group skills* (8th ed.). London: Pearson / Allyn and Bacon.
- Johnson, M.H., Grossmann, T., & Kadosh, K. C. (2009) Mapping functional brain development: Building a social brain through interactive specialization. *Developmental Psychology*, 45, 151-159.
- Kabat-Zinn, J. (2005). *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion.
- Kahn, P.H., & Kellert, S.R. (2002). *Children and nature: Psychological, sociocultural and evolutionary investigations*. London: MIT.
- Kaplan, R., & Kaplan, S. (1989). *The experience of nature: A psychological perspective*. University Press: Cambridge.
- Katz, L.G. (1995). *Talks with teachers of young children*. Norwood, NJ: Ablex.
- Kellert, S.R. (1996). *The value of life: Biological diversity and human society*. Washington, DC: Island Press.
- Kellert, S.R. (1997). *Kinship to mastery: Biophilia in human evolution and development*. Washington, DC: Island Press.
- Kellert, S.R. (2002). Experiencing nature: Affective, cognitive and evaluative development in children. In P.H. Kahn & S.R. Kellert (Eds.), *Children and nature: Psychological, sociocultural and evolutionary investigations* (pp. 117-151). London: MIT.
- Kellert, S.R., & Wilson, E.O. (1993). *The biophilia hypothesis*. Washington, DC: Island Press.

- Kelly, J. (1994). On reflection. *Practice Nurse*, 8(11), pp. 188-192.
- Knapp, D., & Benton, G.M. (2006). Episodic and semantic memories of a residential environmental program. *Environmental Education Research*, 12(2), 165-177.
- Knight, S. (2009). *Forest Schools and outdoor learning in the early years*. London: Sage.
- Knight, S. (2011). *Forest School for all*. London: Sage.
- Kolb, D. (1984). *Experiential learning*. London: Prentice Hall.
- Kramer, R. (1976). *Maria Montessori: Her life and work*. New York: Plume.
- Krathwohl, D.R., Bloom, B.S., & Masia, B.B. (1964). *Taxonomy of educational objectives: The classification of educational goals, Handbook 2, Affective domain*. New York: Longman.
- Kvale, S. (2007). *Doing Interviews*. London: Sage.
- Lamb, C. (2011). Forest School: A Whole school approach. In S. Knight (Ed.), *Forest School for all*. (pp. 28-40). London: Sage.
- Lancaster, Y., & Broadbent, V. (2003). *Listening to young children*. Maidenhead: Open University.
- Lawrence, E. (1952). *Friedrich Froebel and English education*. London: University of London Press.
- Le Compte, M.D., & Goetz, J.P. (1982). Problems of Reliability and Validity in Ethnographic Research. In A. Bryman (Ed.), *Sage benchmarks in social research methods: Qualitative research 2, Volume 2, Quality issues in qualitative research* (pp. 3-40). London: Sage.
- Lewin, K., Dembo, T., Festinger, L., & Sears, P. (1944). Level of aspiration. In J. Hunt (Ed.), *Personality and the behaviour disorders* (pp. 333-378), New York: Ronald Press.
- Lewis, A., & Lindsey, G. (2002). *Researching children's perspectives*. Buckingham: Open University Press.
- Lindon, J. (1999). *Too safe for their own good*. London: National Early Years Network.
- Little, H. (2006). Children's risk-taking behaviour: Implications for early childhood policy and practice. *International Journal of Early Years Education*, 14(2), 141-154.
- Louv, R. (2005). *Last child in the woods: Saving our children from nature deficit disorder*. London: Atlantic Books.
- Lovell, R., O'Brien, L., & Owen, R. (2010). *Review of the research evidence in relation to the role of trees and woods in formal education and learning*: Forest Research.

- Luthar, S.S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
- MacConville, R. (2006). Powerful voices conference draws out pupil opinion on education and services. *SENCO Update*, February, p. 4-5.
- Malone, T. (1981). Toward a theory of intrinsically motivating instruction. *Cognitive Science*, 5, 330-370.
- Mand, C.L. (1967). *Outdoor education*. New York: Lowell Pratt.
- Martindale, C. (1997). Creativity and connectionism. In S.M. Smith, T.B. Ward & R.A. Finke (Eds.), *The creative cognition approach*, (pp. 249-268). Massachusetts Institute of Technology.
- Massey, S. (2005). The benefits of a forest school experience for children in their early years, *Topic 33, nfer*, 27-35.
- May, H. (2005). Whose participation is it anyway? Examining the context of pupil participation in the UK. *British Journal of Special Education*, 32(1), 29-33.
- Maynard, T. (2003). *Forest School Swansea, Neath, Port Talbot: An evaluation*. University of Wales, Swansea: unpublished report.
- Maynard, T. (2007a). Forest schools in Great Britain: An initial exploration, *Contemporary Issues in Early Childhood*, 8(4), 320-331.
- Maynard, T. (2007b). Encounters with forest school and foucault: A risky business? *Education 3 – 13*, 35(4), 379-391.
- Meadows, S. (2006). *The child as a thinker: The development and acquisition of cognition in childhood* (2nd ed.). New York: Routledge.
- Miller, A., Billington, T., Lewis, V., & DeSouza, L. (2008). Educational Psychology. In C.Willig & W.Stainton-Rogers (Eds.), *The SAGE handbook of qualitative research in psychology*. (pp. 472-488). London: Sage.
- Moon, J.A. (2004). *Reflection in learning & professional development: Theory and practice* (2nd ed.). Abingdon: Routledge.
- Montieth, M. (1999). *Making progress? The transition to adulthood for disabled young people in Northern Ireland*. In V. Lewis, M. Kellet, C. Robinson, S. Fraser, & S. Ding, (Eds.), *The Reality of Research with Children and Young People* (pp. 162-180). London: Sage.
- Murray, R., & O'Brien, E. (2005). *'Such enthusiasm - A joy to see': An evaluation of forest school in England*. Forest Research.
- Murray, R., & O'Brien, E. (2006). *A marvellous opportunity for children to learn*. Report carried out by the Forestry Commission and New Economics Foundation.

- National Trust (2012). *Natural Childhood*. Swindon: National Trust.
- New Economics Foundation (NEF). (2004). *Forest school evaluation project: A study in Wales*. London: Report carried out by New Economics Foundation.
- Nhat, Hanh, T. (2003). *Creating true peace: Ending violence in yourself, your family, your community and the world*. New York: Simon and Schuster.
- Nicol, R., Higgins, P., Ross, H., & Mannion, G. (2007). *Outdoor education in Scotland: A summary of recent research*. Perth: Outdoor Connections, SNH, LTS.
- O'Brien, L. (2009). Learning outdoors: The forest school approach. *Education 3-13*, 37(1), 45-60.
- O'Brien, L., & Tabbush, P. (2002). *Health and well-being: Trees, woodlands and natural spaces*. Edinburgh: Forestry Commission.
- Palmer, J. (1998). *Environmental education in the 21st century: Theory, practice, progress and promise*. Routledge.
- Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). London: Sage.
- Piaget, J. (1954). *The construction of reality in the child*. New York: International University Press.
- Piaget, J. (1971). *Biology and Knowledge*. Edinburgh University Press: Edinburgh.
- Polis, D. (Date unknown) A moment with nature. Retrieved April 17, 2012 from the following website: <http://coyoteprime-runningcauseicantfly.blogspot.co.uk/2009/08/moment-with-nature-david-polis.html>
- Pretty, J., Angus, C., Bain, M., Barton, J., Gladwell, V., Hine, R., Pilgrim, S., Sandercock, G., & Sellens, M. (2009). Nature, childhood, health and life pathways. Interdisciplinary Centre for Environment and Society (iCES) Occasional Paper 2: University of Essex
- Putnam, J., Rynders, J., Johnson, D.W., & Johnson, R. (1989). Collaborative skills instruction for promoting positive interactions between mentally handicapped and non-handicapped children. *Exceptional Children*, 55, 550-557.
- Pyle, R.M. (2002). Eden in a vacant lot: Special places, species, and kids in the neighbourhood of life. In P.H. Kahn & S.R. Kellert (Eds.), *Children and nature: Psychological, sociocultural and evolutionary investigations* (pp. 305-328). London: MIT.
- Render, M. (2003). *Woodland for life: The regional woodland strategy for the east of England*. London: EEDA and Forestry Commission.
- Rickinson, M., Dillon, J., Teamey, K., Morris, M., Choi, M.Y., Sanders, D., & Benefield, P.A. (2004). *Review of research on outdoor learning*. London: NFER.
- Ritchie, J., & Lewis, J. (2003). *Qualitative Research Practice: A guide for social science students and researchers*. London: Sage.

- Robson, C. (2002). *Real world research* (2nd ed.). Oxford: Blackwell Publishing.
- Roe, J. (2008). *The restorative power of natural and built environments*. Doctoral thesis, Heriot Watt University.
- Rogers, C. (1983). *Freedom to learn for the 1980s*. New York: Merrill.
- Rogers, A. (1996). *Teaching adults* (2nd ed.). Buckingham: Open University Press.
- Rose, R. (2005). *Encouraging questions and raising voices*. Paper presented at the Inclusive and Supportive Education Congress International Special Education Conference, Glasgow.
- Rueda, M., Rothbart, M.K.R., Saccamanno, L., & Posner, M.I. (2007). Modifying brain networks underlying self-regulation. In D. Romer & E.F. Walker (Eds.). *Adolescent psychopathology and the developing brain: Integrating brain and prevention science* (pp. 401-419). Oxford, UK: Oxford University Press.
- Rushton, S., & Larkin, E. (2001). Shaping the learning environment: Connecting developmentally appropriate practices to brain research. *Early Childhood Education Journal*, 29(1), 25-33.
- Russell, B. (1970). *Education and the good life*. Cambridge University Press.
- Ryan, G.W., & Bernard, H.R. (2000). Data management and analysis methods. In N.K. Denzin & Y.S. Lincoln, (Eds.), *Handbook of qualitative research* (2nd ed.). (pp. 769-802). London: Sage.
- Schon, D. (1983). *The reflective practitioner*. New York: Basic Books.
- Schon, D. (1987). *Educating the reflective practitioner*. London: Jossey-Bass.
- Seligman, M. (2002). *Authentic happiness: Using the new positive psychology to realise your potential for lasting fulfillment*. New York: Free Press.
- Shank, G., & Angeli, C. (2006). Educational psychology, unpublished manuscript. In C.Willig & W.Stainton-Rogers (Eds.), *The SAGE handbook of qualitative research in psychology*. (pp. 472-488). London: Sage.
- Shepard, P. (1996). *The others: How animals made us human*. Washington, DC: Island Press.
- Silverman, D. (2001). *Interpreting qualitative data: Methods for analysing text, talk and interaction* (2nd ed.). London: Sage.
- Silverman, D. (2010). *Doing Qualitative Research* (3rd ed.). London: Sage.
- Siraj-Blatchford, I., & Sylva, K. (2004). Researching pedagogy in English pre-schools. *British Educational Research Journal*, 30(5), 713-730.

- Smith, J.A., & Osborn, M. (2003). Interpretative phenomenological analysis. In J.A. Smith, (Ed.), *Qualitative psychology: A practical guide to methods* (pp. 53-80). London: Sage.
- Sobel, D. (1993). *Children's special places: Exploring the role of forts, dens and bush houses in middle childhood*. Tucson: Zephyr Press.
- Sobel, D. (1996). *Beyond ecophobia: Reclaiming the heart of nature education*. Great Barrington, MA: The Orion Society.
- Stegner, W. (1962). *Wolf willow*. New York: Viking.
- Steinaker, N. & Bell, R. (1979). *The experiential taxonomy: A new approach to teaching and learning*. Academic Press: New York.
- Stephenson, A. (2003). Physical risk-taking: Dangerous or endangered? *Early Years*, 23(1), 35-43.
- Swarbrick, N., Eastwood, G., & Tutton, K. (2004). Self-esteem and successful interaction as part of the forest school project. *Support for learning*, 19(3), 142-146.
- Thomas, G., & Thompson, G. (2004). A child's place: Why environment matters to children. London: Green Alliance / Demos Report.
- Todd, L. (2003a). Enabling pupil participation. *Special Children*, April/May, 22-25.
- Todd, L. (2003b). Consulting the children. *Special Children*, September/October, 15-19.
- Tunstall, J., & Aldgate, J. (2001). *Services for children in need: From policy to practice*. London: The Stationery Office.
- Ulrich, R. (1983). Biophilia and biophobia. In S.R. Kellert & E. O. Wilson (Eds.), *The biophilia hypothesis*. Washington, DC: Island Press.
- United Nations International Children's Emergency Fund (UNICEF). (1989). *Universal Declaration of the Rights of the Child*. New York: UNICEF.
- Valentine, G. (2004). *Public spaces and the culture of childhood*. Aldershot: Ashgate.
- Von Restorff, H. (1933). Über die Wirkung von Bereichsbildungen im Spurenfeld (The effects of field formation in the trace field). *Psychologie Forschung*, 18, 299-34.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L.S. (1987). *Thinking and speech* (Norris, M., Trans. Vol.1). New York: Plenum Press. (Original work published in 1934).
- Waite, S., Davis, B., & Brown, K. (2006a). *Forest school principles: 'why we do what we do'*. Report for funding body EYDCP (zero14plus) and participants.

Waite, S., Davis, B., & Brown, K. (2006b). Five stories of outdoor learning from settings for 2-11 year olds in Devon. report for funding body EYDCP (zero14plus) and participants.

Wallace, M. (1996). When is experiential learning not learning? In G. Claxton, T. Atkinson, M. Osborn & M. Wallace (Eds.), *Liberating the learner: Lessons for professional development in education* (pp. 16-32). London: Routledge.

Warming, H. (2011). Getting under their skins? Accessing young children's perspectives through ethnographic fieldwork. *Childhood*. 18(1). 39 – 53.

Welsh Assembly Government (2001). *The learning country*. Cardiff: National Assembly for Wales.

Welsh Assembly Government (2003). *The learning country: the foundation phase 3-7 years*, consultation document. Cardiff: National Assembly for Wales.

Welsh Assembly Government (2004). *The Foundation Phase in Wales: a draft framework for children's learning*. Cardiff: National Assembly for Wales.

Welsh Assembly Government (2006). *Children and Young People: Rights to Action*. Cardiff: Welsh Assembly Government.

Welsh Assembly Government (2007a). *The Foundation Phase in Wales: a framework for children's learning, consultation document*. Cardiff: National Assembly for Wales.

Welsh Assembly Government (2007b). *Why do people's ages go up and not down? Our Rights – Our Story*. Funky Dragon: The children and young people's assembly for Wales. Cardiff: National Assembly for Wales.

Welsh Assembly Government (2008a). *Foundation Phase Framework for Children's Learning for 3 to 7-year-olds in Wales*. Cardiff: National Assembly for Wales.

Welsh Assembly Government (2008b). *Making the most of learning: Implementing the revised curriculum*. Cardiff: National Assembly for Wales.

Welsh Assembly Government (2008c). *Skills framework for 3 to 19-year-olds in Wales*. Cardiff: Welsh Assembly Government.

Wentzel, K.R., & Watkins, D.E. (2002). Peer relationships and collaborative learning as contexts for academic enablers. *School of Psychology Review*, 31, 366-377.

White, R., & Heerwaen, J. (1998). Nature and mental health. In A. Lundberg (Ed.), *The environment and mental health*. Mahwah, NJ: Erlbaum.

Willig, C. (2001). *Introducing qualitative research in psychology: Adventures in theory and method*. Buckingham: Open University Press.

Willig, C. (2008). Discourse analysis. In J.A.Smith, (Ed.), *Qualitative psychology: A practical guide to research methods* (2nd ed.). (pp. 160-185). London: Sage.

Yardley, L., & Bishop, F. (2008). Mixing qualitative and quantitative methods: A pragmatic approach. In C. Willig, & W. Stainton-Rogers, (Eds.), *The Sage Handbook of qualitative research in psychology* (pp. 352-371). London: Sage.

Yardley, L. (2008) Demonstrating validity in qualitative psychology. In J.A. Smith, (Ed.), *Qualitative psychology: A practical guide to methods* (pp. 235-251). London: Sage.

Yin, R.K. (1994). *Case study research design and methods* (2nd ed.). Thousand Oaks: Sage.

Appendix 1: Ethics proposal

Thesis Proposal (Box B)

1. Title of project

The Forest School initiative and its perceived impact on children's learning and development: An investigation into the views of children and their parents.

2. Purpose of the project and its academic rationale

The purpose of this study is to investigate the Forest School initiative and its perceived impact on children's learning and development from the perspectives of children and parents. The Forest School model originated in Scandinavia and involves participants journeying by foot (if possible) to a local woodland environment to learn outdoors on a regular sustained basis. It is a long-term client/child-led, educational process that promotes, observes and explicitly supports the social, emotional and physical development of children, young people and adults in an outdoor, preferably woodland, environment. Some academic research in this field has been conducted within the last decade but is limited to small-scale evaluations and case studies (Murray, 2004; Swarbrick, Eastwood & Tutton, 2004; Murray & O'Brien, 2005; Davis & Waite, 2005; O'Brien & Murray, 2007) that report improvements in children's social skills and learning. These studies generally focus on the perspectives of adults taking part in the initiative and often have some link to the initiative itself or the Forestry Commission who were involved in its development within the UK. The purpose of this study is to largely focus on children's voices (Clark & Statham, 2005) to elicit their perceptions of the Forest School initiative and how this can impact on their learning and development. Alongside this, the perceptions of parents will also be investigated to ascertain whether the espoused benefits are seen at home and to allow them to share their thoughts as to the overall impact of the initiative on their children.

Jarvis, Holford and Griffin (1999) state that experiential learning may be defined as the process of creating and transforming experience into skills, knowledge, attitudes, values, emotions, beliefs and senses. It is the process through which individuals become themselves (Jarvis, Holford & Griffin, 1999). Experientialists (Lewin, 1935; Lewin & Grabbe, 1945) view the experience itself as a social construct. Individuals construct their own unique interpretation of events (Burr, 1995) which are likely to have a range of 'realities' and 'meanings', depending on the expectations, concepts and theories chosen to inform perspectives. This is something that Forest School seeks to achieve, suggesting that children's previous experiences can contribute, hinder or change their perspectives, given the range of learning opportunities presented.

In England, Every Child Matters (Department for Education, 2004) and Wales, Rights to Action, (Welsh Assembly Government, 2006) learning outdoors provided a route through which many of the outcomes in the above documents could be achieved. Often the quality of the learning experience outside the classroom, alongside carefully planned activities, can be defining factors for successful outdoor learning. One such initiative that seeks to provide both these factors is Forest

School. The Forestry Commission describes Forest School 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 local woodland environment” which is “complementary, not separate to learning in a traditional classroom or school ground environment.” (Murray & O’Brien, 2005, p.11).

The perspectives of Forest School leaders and school staff have been reported in a number of evaluative studies on how Forest School benefited the pupils themselves within primary school. Yet there is little empirical evidence from the perspective of the individuals most directly involved in the process, the children and the views of parents. This study aims to provide an insight into children’s and parents’ perceptions of the Forest School initiative which can supplement the growing research in this area.

3. Summary of Objectives

- To investigate children’s perceptions of the Forest School initiative and its potential influence on their learning and development.
- To investigate parents’ perceptions of the Forest School initiative and its potential influence on the learning and development of their children.

4. Brief description of methods and measurements

This study will use qualitative research methods in the form of semi-structured interviews with children and focus groups with parents.

The research will focus on both children’s and parent’s perspectives of the Forest School initiative. Parents will be contacted in writing and made aware of the aims and commitment required in taking part in the research.

Each interview and focus group will be recorded using a dictaphone. This method of recording has been chosen to ensure that the researcher is able to capture all the information reported by participants.

5. Participants: recruitment methods, number, age, gender, exclusion/inclusion criteria

- i. Pupils and parents will be selected from one mainstream primary school willing to participate. The school will be selected from one Local Authority.
- ii. Once approval from the Chief Education Officer has been given I will contact Forest School leaders for that Authority to acquire a list of schools who have been implementing the Forest School initiative for more than two years. I will then randomly select a school from the list provided and contact the head teacher directly through a telephone conversation. The head teacher will be asked whether he/she would be willing for the research to take place within their school. If the head teacher is agreeable then the process will move forward, if he/she is not agreeable, then another school will be randomly selected from the

original list and the process will be repeated until a head teacher is willing to participate.

- iii. The head teacher of the participating Primary school will then be sent an email. Within this email the rationale and aims of the study as well as the participants needed and method for collecting data will be conveyed.
- iv. Ten pupils aged between four and ten years old who have taken part in the Forest School initiative within their school will be invited to take part in one-to-one semi-structured interviews. The year groups chosen for this research are years one to five, to provide a range of experiences and reflect the development stages of the children. The gender split shall be five males and five females. Pupils will be selected dependent on parental permission being given to participate. Children with special educational needs will not be included in the random selection as the nature of the small scale interviews will require them to have a sufficient level of verbal communication skills. Children will not be aware of the selection criteria for the sample to be used.
- v. Following the interviews, parents who are willing to participate in a focus group will then be contacted. Parents will be informed about a time and date for the focus group to take place.

6. Consent and participant information arrangements, debriefing

- i. Consent will be sought from the Chief Education Officer and subsequently a head teacher of a Primary school.
- ii. Once the school has been chosen I will brief teaching staff regarding the recruitment methods for the study in a staff meeting. Following this, I will brief each year group between year one and year five and ask teaching staff to distribute consent forms to pupils wishing to participate to take home to their parents. Each consent form will have a date for when it is to be returned to the child's class teacher. I will collect the forms the day after the return date. Once the consent forms have been returned and collected, I will then randomly select one male and one female from each of the five year groups, who have returned a signed parental consent form, to take part in a semi-structured interview.
- iii. Pupils will be selected dependent on parental permission being given to participate. All pupils will be asked to complete a consent form at the beginning of the interview to ensure they are still willing to participate. A child friendly script will be read to each participant outlining the process.
- iv. A debrief form will be given to the head teacher at the beginning of the process and also to parents of the children who participated after the semi-structured interviews.

7. A clear but concise statement of the ethical considerations raised by the project and how these will be addressed

The researcher does not feel there is any deception involved in this research. In addition, it is not the intention of the researcher that any participant will be at risk, in

terms of personal safety or psychological distress, as a result of participation. The intention of this research is to gain children's and parents' perspectives of the initiative and its perceived impact.

Each participant will be made aware of how personal information and data will be stored. The distinction will be made between confidential and anonymous information. The name and contact details of each participant will be held confidentially by the researcher in a password protected Word document. No other person will have access to this information. The information provided will be stored confidentially.

The information provided by children and parents during the small-scale interviews and focus groups will remain confidential to the researcher. Participants will have the option to withdraw from the research at any point if they so wish until the data are made anonymous. Once the interviews and focus groups have been completed I will make the data anonymous through coding. Once the interviews and focus groups have taken place and been anonymised and transcribed, participants' data will not be able to be removed. The data will be anonymised one week after the interviews have been conducted. Participants have the right to withdraw until the data have been anonymised.

Any reference to the data in the written report will be anonymous; individual participant's comments will be referred to anonymously and no reference will be made to the names of the individuals who participated. The report will be anonymous to any individual reading it.

8. Estimated start date and duration of project

The majority of the research is likely to be conducted during the Summer Term of 2011. The project will be written up in full and submitted to the School of Psychology in April 2012.

Appendix 2: Consent letter to the Local Authority

School of Psychology
Tower Building
Park Place
Cardiff
CF10 3AT

_____ 2011

Dear Mr / Mrs,

I am writing to enquire whether you would give permission to allow one school within the Local Authority to participate in the following research.

I am a trainee educational psychologist from the School of Psychology, Cardiff University. As part of my doctoral programme I am carrying out a study on children's and parents' perceptions of the Forest School initiative.

The objective of this study will be investigated through the following aims:

- To investigate children's perceptions of the Forest School initiative and its potential influence on their learning and development.
- To investigate parents' perceptions of the Forest School initiative and its potential influence on the learning and development of their children.

If you are able to give your approval I will then randomly select a school from a list provided by Forest School leaders and contact the head teacher directly through a telephone conversation. The head teacher will be asked whether he/she would be willing for the research to take place within their school. The process will be repeated until a head teacher is willing to participate. The head teacher of the participating Primary school will then be sent an email outlining the rationale and aims of the study, including the participants needed and method for collecting data.

The data collected and contact information of participants will be held confidentially by the researcher in a password protected Word document in a locked cupboard. No other person will have access to this information. The information provided will be stored confidentially. Once collected the interview transcripts will be anonymised and the data coded. Participants have the right to withdraw until the data have been anonymised. After this period, the researcher will be unable to trace the information they provided back to individuals. Any reference to the data in the written report will be anonymous; individual participant's comments will be referred to anonymously and no reference will be made to the name of the individual's who participated or the school. The report will be anonymous to any individual reading it.

This research will be supervised by my university supervisor, John Gameson, (contact details given below). Should you have any questions or wish to discuss any concerns then please contact Mark Close or John Gameson. If at any stage it is felt that a complaint is warranted, please contact the Psychology Ethics Committee Secretary, Dominique Mortlock at the University (contact details below).

I will try to contact you again after sending this letter / email, to confirm whether you agree to allow one school within the Local Authority to participate in this research. If you agree to this study

commencing, I will then contact head teachers to obtain their consent. Please let me know if you require any further information.

Regards,

Mark Close, Year Two Trainee Educational Psychologist

Important Contact Details		
Mark Close	John Gameson	Dominique Mortlock
Trainee Educational Psychologist	Professional Director, DEdPsy Cardiff University	Psychology Ethics Committee Secretary
School of Psychology Tower Building Park Place Cardiff CF10 3AT	School of Psychology Tower Building Park Place Cardiff CF10 3AT	School of Psychology Tower Building Park Place Cardiff CF10 3AT
029 2087 4007	029 2087 5393	029 2087 4007
closemw@cardiff.ac.uk	gamesonj@cardiff.ac.uk	psychethics@cf.ac.uk

Appendix 3: Email to head teacher

School of Psychology
Tower Building
Park Place
Cardiff
CF10 3AT

_____ 2011

Dear

I am writing to enquire whether you would give permission to allow pupils and their parents from your school to participate in the following research.

I am a trainee educational psychologist from the School of Psychology, Cardiff University. As part of my doctoral programme I am carrying out a study on children and parents perceptions of the Forest School initiative.

The objective of this study will be investigated through the following aims:

- To investigate children's perceptions of the Forest School initiative and its potential influence on their learning and development.
- To investigate parent's perceptions of the Forest School initiative and its potential influence on the learning and development of their child.

I would need to speak to the teaching staff involved in running the initiative regarding the recruitment methods for the study. During this discussion it would be beneficial if I could leave the consent forms for each year group between year one and year five and ask teaching staff to distribute these to pupils to take home to their parents. Each consent form will have a date for when it is to be returned to the child's class teacher agreed during the initial discussions. I will collect the forms the day after the return date. Once the consent forms have been returned and collected, I will then randomly select one boy and one girl from each of the five year groups, who have returned a signed parental consent form, to take part in an approximately thirty minute semi-structured interview. All pupils will be asked to complete a consent form at the beginning of the interview to ensure they are still willing to participate. A child friendly script will be read to each participant outlining the process.

Following the interviews, parents who are willing to participate in a focus group will then be contacted. Parents will be informed about a time and date for the focus group to take place.

A debrief form will be provided to yourself at the beginning of the process and also to parents of the children who participated after the semi-structured interviews.

Ten / fourteen pupils aged between four and ten years old who have taken part in the Forest School initiative within their school will be invited to take part in one-to-one semi-structured interviews. The year groups chosen for this research are years one to five, to

provide a range of experiences and reflect the development stages of the children. The gender split shall be five males and five females. Pupils will be selected dependent on parental permission being given to participate. Children with special educational needs will not be included in the random selection as the nature of the small scale interviews will require them to have a sufficient level of verbal communication skills. Children will not be aware of the selection criteria for the sample to be used.

The data collected and contact information of participants will be held confidentially by the researcher in a password protected Word document in a locked cupboard. No other person will have access to this information. The information provided will be stored confidentially. Once collected the interviews will be anonymised and the data coded. Participants have the right to withdraw until the data has been anonymised. After this period, the researcher will be unable to trace the information they provided back to individuals. Any reference to the data in the written report will be anonymous; individual participant's comments will be referred to anonymously and no reference will be made to the name of the individual's that participated or the school. The report will be anonymous to any individual reading it.

This research will be supervised by my university supervisor, John Gameson, (contact details given below). Should you have any questions or wish to discuss any concerns then please contact Mark Close or John Gameson. If at any stage it is felt that a complaint is warranted, please contact the Psychology Ethics Committee Secretary, Dominique Mortlock at the University (contact details below).

If you agree to your school participating in this research I will liaise with [class teacher] to contact the class teachers for the relevant year groups to begin the process of obtaining pupil and parental consent. Please let me know if you require any further information.

Regards,

Mark Close, 2nd Year Trainee Educational Psychologist

Contact Details		
Mark Close	John Gameson	Dominique Mortlock
Trainee Educational Psychologist	Professional Director, DEdPsy Cardiff University	Psychology Ethics Committee Secretary
School of Psychology Tower Building Park Place Cardiff CF10 3AT 029 2087 4007	School of Psychology Tower Building Park Place Cardiff CF10 3AT 029 2087 5393	School of Psychology Tower Building Park Place Cardiff CF10 3AT 029 2087 4007
closemw@cardiff.ac.uk	gamesonj@cardiff.ac.uk	psychethics@cf.ac.uk

Appendix 4: Consent letter to parents for their child's participation in interview and parental participation in a focus group

Date

Dear parent,

I am a trainee educational psychologist from the School of Psychology, Cardiff University. As part of my doctoral programme I am carrying out a study on children's and parents' perceptions of the Forest School initiative. I am carrying out this research through [Name of EPS], where I am currently on placement. Prior to my participation in a doctoral course I have a range of experiences from primary teacher to learning support staff across a number of educational settings from nursery to further education.

This study aims to gain the views of children and parents to provide more information about their perspectives regarding the Forest School initiative.

I am writing to ask if you will please give consent for your child to participate in a short talk/interview with me at school and whether you would consider taking part in a small focus group. Following the children's interviews, parents willing to participate in the focus group will be contacted by myself. Parents will be informed about a time and date for the focus group to take place.

Participants are free to ask any questions or discuss any concerns at any time with myself, university supervisor John Gameson or the Psychology Ethics Committee Secretary, Dominique Mortlock. If at any stage it is felt that a complaint is warranted, please contact the University (full contact details below).

Please indicate on the attached consent form if you agree to your child taking part in an interview and whether you would be interested in taking part in a subsequent focus group at the school. It would be greatly appreciated if you are able to return the reply slip attached to [name of school] as soon as possible. It is hoped this research will give an insight into children's and parents' perspectives regarding the Forest School initiative and its impact on children's learning and development.

Many thanks,

Yours sincerely,

Mark Close, Trainee Educational Psychologist

Important Contact Details		
Mark Close	John Gameson	Dominique Mortlock
Trainee Educational Psychologist	Professional Director, DEdPsy Cardiff University	Psychology Ethics Committee Secretary
School of Psychology Tower Building Park Place Cardiff CF10 3AT 029 2087 4007	School of Psychology Tower Building Park Place Cardiff CF10 3AT 029 2087 5393	School of Psychology Tower Building Park Place Cardiff CF10 3AT 029 2087 4007
closemw@cardiff.ac.uk	gamesonj@cardiff.ac.uk	psychethics@cf.ac.uk

Parent's name _____

Child's name _____

Year Group _____

Child Interview

I give consent for my child [name] to take part in the short 30 minute talk. Please tick ✓

☐

I do not give consent for my child to take part in the short 30 minute talk. Please tick ✓

☐

Focus Group

I would like to take part in a short 45 / 60 minute focus group. Please tick ✓

☐

I would not like to take part in a short 45 / 60 minute focus group. Please tick ✓

☐

Please can you choose one of the following methods of contact so I am able to get in touch if you are willing to participate in the focus group.

Tel / Mobile number _____


Email _____


Address _____

I, _____ (NAME, Please print) consent to my child and I participating in the study conducted by Mark Close, who is currently attending School of Psychology, Cardiff University, and working as a trainee educational psychologist in [Name of Local Authority].

I would be most grateful if this consent slip could be returned to your child's class teacher by _____ of _____ 2011.

Appendix 5: Consent form for children participating

I am happy to take part in the 30/40 minute talk at school.  ☐

I am not happy to take part in the 30/40 minute talk.  ☐

Child's name.....

Child's signature.....

Appendix 6: Script to be read to interviewees before interview commences

Bullet points: language adapted depending on the age of the child

- Introductions, outline of the study
- Outline confidentiality (offer explanation if needed)
- Outline anonymity (offer explanation if needed)
- Participants right not to answer and right to withdraw self, tape recording, transcript
- Length of interview
- Safeguarding

Example for Year 4 / 5 participants

Hi my name is..... and I am a trainee psychologist. Psychologists visit schools to help pupils and teachers with things to do with education, thoughts and feelings or behaviour. I am visiting your school today to ask children about the Forest School program that takes place in your school. I am going to ask you some questions and record what we say here (point to the dictaphone), is that ok with you?

Now it is important to tell you that no-one will hear the tapes except me and no-one will know that it is you speaking on the tape apart from me because everything you say is confidential and will then be made anonymous. Do you know what anonymous means? *If no, give explanation.*

(Anonymous means that the things you say in the interview today cannot be attached to you or your name. Once we have finished the interview, your name will be replaced usually by a code like this – *show written example of 'participant 1' or 'child 1'* which means that your name is kept a secret. It means you can say what you think honestly and openly).

If you decide that you don't want to answer a question then we can leave that one out. You don't have to tell me why you don't want to answer it. If you want to come back to the question, that will also be ok. If you want to stop the interview at any time then you just let me know and we can stop. You are free to withdraw yourself and the interview tape at any time and are able to request your transcript until the data have been anonymised.

The interview is going to last around thirty minutes (show example of clock hands moving for younger pupils) and it will be just you and I having a chat about your Forest School experiences. This isn't a test, so don't worry about getting anything wrong as there is no right or wrong answer.

All of the things that we talk about today will just be between us, but if you told me something that I thought might affect your safety, I will have to share that with someone else so that I could make sure you were ok. Does that sound ok to you?
Do you have any questions you want to ask before we start the interview?

Appendix 7: Debrief Sheet

Thank you for giving your consent for your child to participate in this research which took place today at school.

This research is entitled 'The Forest School initiative and its perceived impact on children's learning and development: An investigation into the views of children and their parents.'

The objective of this study will be investigated through the following aims:

- To investigate children's perceptions of the Forest School initiative and its potential influence on their learning and development.
- To investigate parents' perceptions of the Forest School initiative and its potential influence on the learning and development of their children.

The data collected and contact information of the participants will be held confidentially by the researcher in a password protected word document and a locked cupboard. No other person will have access to this information. The information provided will be stored confidentially. Once the data have been collected the interviews will be anonymised. Participants have the right to withdraw until the data are anonymised. After this period, the researcher will be unable to trace the information participants provide back to individuals.

This information will be retained until September 1st 2011 after the transcription has been completed and the data have been anonymised. Any reference to the data in the written report will be anonymous; individual participant's comments will be referred to anonymously and no reference will be made to the names of the children, parents or school that participated. The report will be anonymous to any individual reading it.

Participants are free to ask any questions or discuss any concerns at any time with the researcher, Mark Close, the university supervisor, John Gameson or the Psychology Ethics Committee Secretary, Dominique Mortlock. If at any stage it is felt that a complaint is warranted, please contact the University (full contact details below).

Important Contact Details		
Mark Close	John Gameson	Dominique Mortlock
Trainee Educational Psychologist	Professional Director, DEdPsy Cardiff University	Psychology Ethics Committee Secretary
School of Psychology Tower Building Park Place Cardiff CF10 3AT	School of Psychology Tower Building Park Place Cardiff CF10 3AT	School of Psychology Tower Building Park Place Cardiff CF10 3AT
029 2087 4007	029 2087 5393	029 2087 4007
closemw@cardiff.ac.uk	gamesonj@cardiff.ac.uk	psychethics@cf.ac.uk

Appendix 8: Thank you letter for children who participated

Thank you



Thank you so much for helping me with my project.

I have been doing interviews with children in your school to find out their thoughts and experiences about Forest School.

Lots of children take part in Forest School in Wales and many other countries. Hopefully, what you have said will help to let other people know what you and other children think, which is very important.

I just wanted to say a really big thank you for talking to me.

Without your help, this project would not have been able to take place.

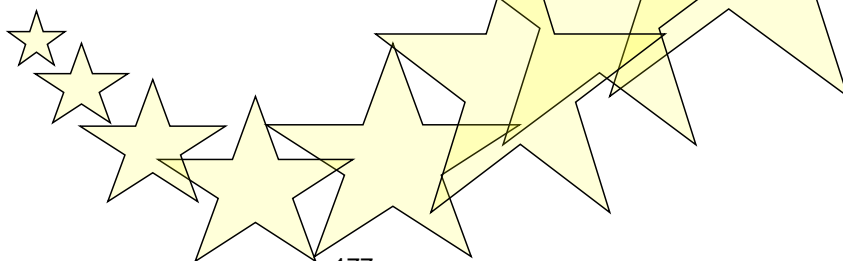
If you think of any questions that you would like to ask about the interview then please let one of your teachers know.



Best wishes for the future,

Mark (Mr Close)

Trainee Educational Psychologist



Appendix 9: Semi-structured interview questions for children

If necessary, a soft toy will be used for younger children to allow them to relate their experiences.

1. Ice breaker – to be determined depending on the age of the child interviewed.
(Introduce soft toy if necessary).
2. Can you tell [me / name of soft toy] about Forest School?
3. What do you do in Forest School?
4. Where do you go when you do Forest School?
5. What do you like about Forest School?
6. What don't you like about Forest School?
7. What are the best things about Forest School?
8. What are the least enjoyable things about Forest School?
9. What else do you think about Forest School?
10. How do you feel when you take part in Forest School?
11. What new things (skills) have you learned from Forest Schools?
12. What are you better at now you have gained experience through Forest School?
13. What is the one thing you would tell [name of soft toy] about your Forest School experience?

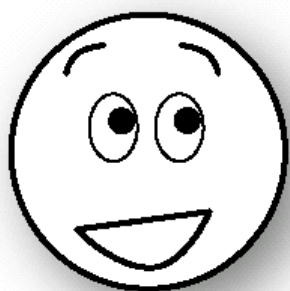
Appendix 10: Selection of photographs of Forest School activities

(Taken from Griffiths et al. (2010) & Forestry Commission – 'A guide to Forest Schools in Wales (2010)

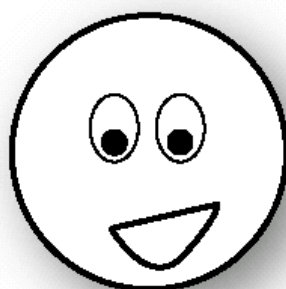


Appendix 11: Positive and negative feeling cards

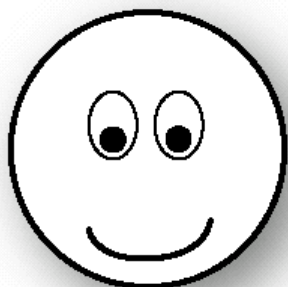
Surprised



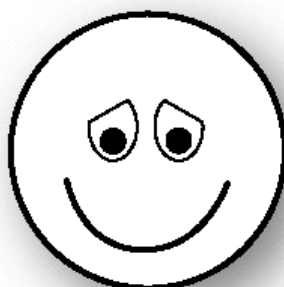
Glad



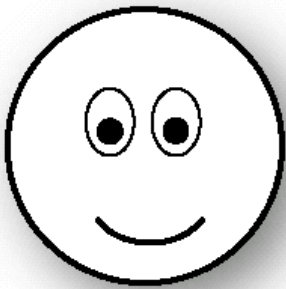
Pleased



Brave



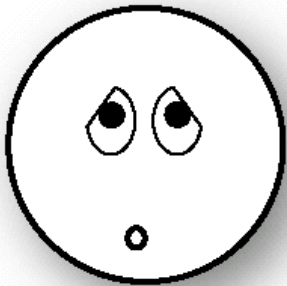
Confident



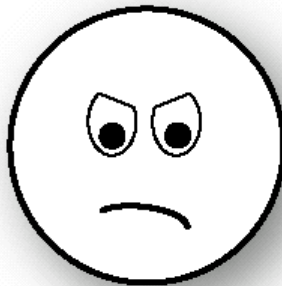
Friendly



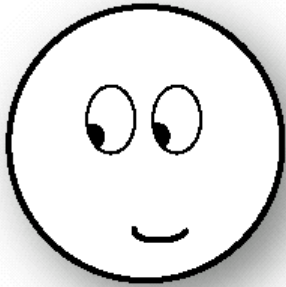
Frightened



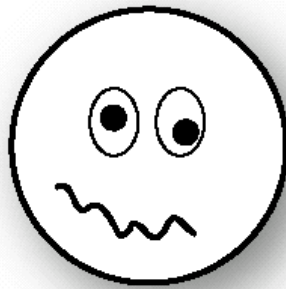
Angry



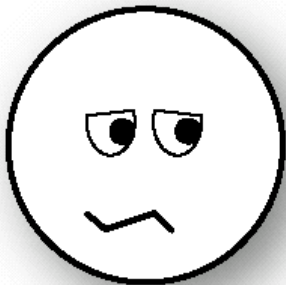
Shy



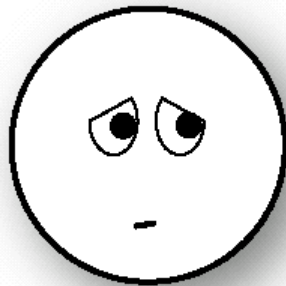
Confused



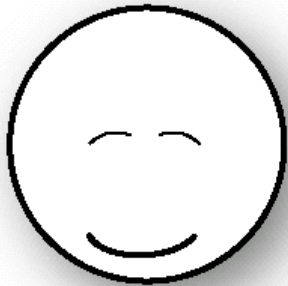
Frustrated



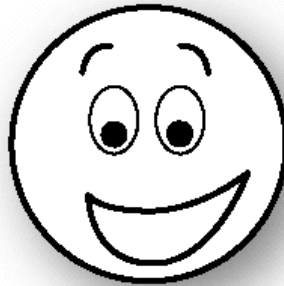
Worried



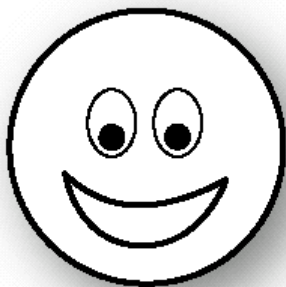
Relaxed



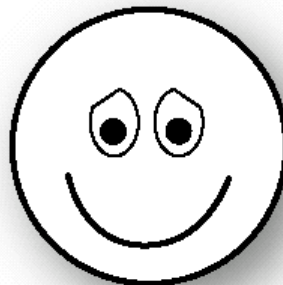
Excited



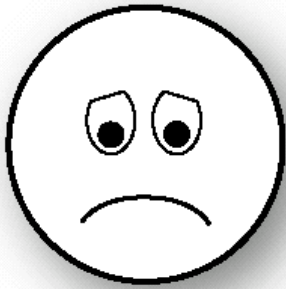
Happy



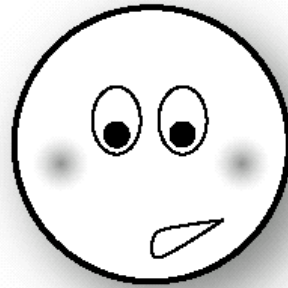
Proud



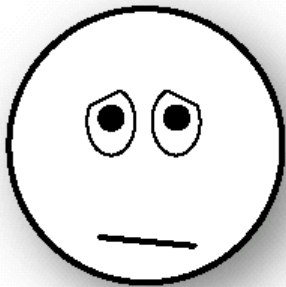
Sad



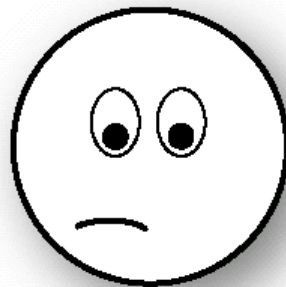
Embarrassed



Disappointed



Left out



Appendix 12: Focus group schedule for parents

Ice breaker – inviting parents to introduce themselves and say a little bit about themselves.

1. What is your understanding of the Forest School initiative?
2. What activities has your child told you about doing in Forest School?
3. What do you think of the Forest School initiative?
4. What do you think your child feels about taking part in Forest School?
5. Which elements of Forest School does your child enjoy?
6. Which elements of Forest School does your child find difficult?
7. What skills do you feel your child has learned?
8. Can you give any examples of how the Forest School initiative has had an effect on your child's learning?
9. In what ways do you think the Forest School initiative has had an effect on your child's development?
10. What effect have these skills that they have learned had on the home environment?

Appendix 13: An example of an interview transcript with additional comments

Child 3

1. Child 3 – There is a little plant garden down there.
2. MC – Oh right, a little plant garden? Right, and what sort of things go in there?
3. Child 3 – Um, it's planted by [class teacher's name]'s class and they are planting
4. loads of flowers down here.
5. MC – Oh ok, so that's important then? |
6. Child 3 – Yeah.
7. MC – So do you know what flowers they are planting?
8. Child 3 – No because we haven't seen them planting it. Every so often children come
9. down here to read books because it's like a quiet area when we are out playing.
10. MC – Ok, so a nice little area to go, thank you for showing me that because I
11. wouldn't have known it was there.
12. Child 3 – There are some more plants that we've planted.
13. MC – Oh ok, the ones inside yeah? Why do you have those inside then?
14. Child 3 – Normally when we are going home we wait for children there. That's where
15. there is like a bunching group area and it's a nice place to have a chat so it's just
16. standing out a little bit more.
17. MC – Right, that's a really nice idea. So what's that there then?
18. Child 3 – It's um, a little plant area because that's where the diners go in and out. It
19. just makes it nicer. | By here is the butterfly garden.
20. MC – Right? I would never have guessed. So who made this then?
21. Child 3 – I think it was [class teacher's name] who made this.
22. MC – Can you remember what year group it was that did that?
23. Child 3 – Um, Year [says the year group - upper juniors]
24. MC – But you are a Year [says year group]. How do you know this is a butterfly
25. garden if you didn't do it?
26. Child 3 – Because I'm on the Eco-committee.
27. MC – Oh ok, so the eco-committee knew this was happening? |
28. Child 3 – Yeah.
29. MC – So is it just butterflies in here then?
30. Child 3 – Well we have seen other mini beasts in there.
31. MC – Can you see any now?
32. Child 3 – There's a bee. |
33. MC – So who looks after this area?
34. Child 3 – [Class teacher's name] and the children who have done it.
35. MC – Right, so maybe when you are a bit older you will be able to look after it then?
36. Child 3 – Yeah we might be doing it. | You've got some more plants over there
37. (points).

Commented [01]: Theme 22 - Making reference to FS areas

Commented [02]: Theme 1 – Appreciation of surroundings

Commented [03]: Theme 11 – Knowledge and awareness of the whole school

Commented [04]: Theme 14 – Key skill, Observation

Commented [05]: Theme 13 – Motivation of school (Ethos)

38. MC – So what would the next stop on our walk be then?
39. Child 3 – The hollow tunnel by there.
40. MC – Right ok, a tunnel?
41. Child 3 – Yeah it's a hollow tunnel and that's a tree where we put little nests for birds
42. made out of wood that we use to help nature. Down there you can just about spot it,
43. there is our Eco green flag. We are trying to work on a project with the Eco club and
44. we are going to make something on Wednesday at lunchtime for the Eco club.
45. MC – Oh right, ok. So those bird boxes then, do you know who made those?
46. Child 3 – I think it was [class teacher's name] who made them last year. I've only just
47. joined this year because I've been a councillor this year and the deputy and our
48. school councillor couldn't make Eco club because they done it after school and if
49. they did it after school then I wouldn't be able to attend because I'm going
50. swimming but if it stays at lunchtimes that's going to be good for me.
51. MC – Is it something you enjoy doing?
52. Child 3 – Yeah. (smiles)
53. MC – I can see you smiling there.
54. Child 3 – It's something I'm committed too.
55. MC – So what else have we got that is important then?
56. Child 3 – The bird box.
57. MC – Oh I didn't notice that. Did you have to climb up and put them up yourself?
58. Child 3 – No, that was what they did last year. All the bird boxes they did last year.
59. MC – Do you know what type of trees these are?
60. Child 3 – No not really.
61. Child 3 – So this is the Willow Tunnel I said about earlier.
62. MC – So what is through there then?
63. Child 3 – Well it's bark and it's made out of things from nature.
64. MC – Are we going to go through it?
65. Child 3 – If you want to (smiles).
66. MC – I don't know what do you think? It's your walk, I'm going to follow you.
67. Child 3 – Over here is another tree. When we were building habitats we thought this
68. tree was good for a habitat.
69. MC – A habitat?
70. Child 3 – A bird's egg. We built ours down by here (points to the ground) but if I was
71. a bit higher I would have built mine up in the tree.
72. MC – Right, I see, so you chose that as a habitat.
73. Child 3 – Because if like a fox comes around he wouldn't be able to get it because he
74. wouldn't be able to climb up this tree. Because the problem with that (points to the
75. ground) is if nobody comes down how would the egg be safe?
76. MC – Right, that's a really good point.
77. Child 3 – By here is a train, again [class teacher's name] made.
78. MC – Right, and what do you use that for?
79. Child 3 – Well, the Nursery kids do play on this.
80. MC – Do you use it for anything?
81. Child 3 – I think the Nursery children use it as a real train to play around on when

Commented [06]: Theme 22 –Reference to FS area.

Commented [07]: Theme 1 – Appreciation of surroundings

Commented [08]: Theme 13 – Motivation of school (Ethos)

Commented [09]: Theme 11 – Knowledge and awareness of the whole school

Commented [010]: Theme 19 – Ownership, also a sense of responsibility

Commented [011]: Theme 11 – Knowledge and awareness of whole school

Commented [012]: Theme 1 – Appreciation of surroundings, also demonstrating knowledge and awareness

Commented [013]: Theme 9 – Richness of the learning experience

Commented [014]: Theme 11 – knowledge and awareness of whole school

82. they are about to go home with their parents.

83. MC – Do you know how long this has been here for?

84. Child 3 – I'd say since I joined the Nursery which was about (?) years ago.

85. MC – Did you play on this when you were in Nursery?

86. Child 3 – Yeah.

87. MC – You've got a big smile on your face there, why is that?

88. Child 3 – Because I can remember we were all walking across it like that and then

89. one of the kids fell off by there and he went "uugh".

90. MC – Was he alright?

91. Child 3 – Yeah.

92. MC – I bet you can't imagine falling off that now because your bigger. That's a really

93. lovely memory to have. So is there anything else that is important?

94. Child 3 – Um, there are some brushes by there.

95. MC – Would you use those for anything?

96. Child 3 – Well normally we would because again when we were doing the habitats

97. loads of children were going inside and placing their egg and making a habitat in

98. that area.

99. Child 3 – The Nursery have got Forest School equipment and they were planting and

100. stuff like that.

101. MC – You seem to know a lot of things happening in the school about Forest

102. Schools.

103. Child 3 – Um, I think it's to do with the Eco-committee.

104. MC – But it shows to me that you are able to remember things.

105. Child 3 – Around there is a log circle and there is some good Forest School things

106. over there and that's our main Forest School area around by here. It's more

107. important than all the other things I guess.

108. MC – So you think it's the most important?

109. Child 3 – Yeah. Here's the log circle, by there.

110. MC – Oh right, so you've got two log circles?

111. Child 3 - Yeah, that's we don't really use the, again the Nursery like playing around

112. with it and by here is, well I think before I think it was adults were chopping the

113. wood and I think that's what we used for our egg habitat. But it was a bit of a

114. nightmare putting it all back in.

115. MC – Oh, why was that?

116. Child 3 – Because we had to lift one up (log) and put it back down and we didn't

117. enjoy it.

118. MC – Oh ok, so it was hard work.

119. Child 3 – Down by here it's like a little ditch bit.

120. MC – Oh, I might fall.

121. Child 3 – No, don't worry. None of us have fallen yet and um, in here again we used,

122. this was one of the habitats that wasn't taken down properly. It's kind of nice for

123. you to see it. But this was like a dome shape so they put all the twigs in, wrapped

124. them all around and they made it look a bit nice.

125. MC – This is a really steep slope this is.

Commented [O15]: Theme 3 – Recall of a past event.
Positive memory

Commented [O16]: Theme 3 – Recall of a past event

Commented [O17]: Theme 11 – Knowledge and
understanding of whole school / Theme 27 - Resources

Commented [O18]: Theme 8 – Sense of child developing,
gaining experience

Commented [O19]: Theme 22 – Making reference to FS
areas / emphasising it's the most important area, the log circle

Commented [O20]: Theme 9 – Recall of a past event

126. Child 3 – Yeah and this, when we go down there we don't slip because we use the
 127. trees.
 128. MC – Oh right so you use the trees to hold on to. So you are allowed to go down
 129. there?
 130. Child 3 – Hmm, in Reception we weren't I don't know if we are still allowed down
 131. there now.
 132. MC – Ok, so this is the log circle then.
 133. Child 3 – Yeah. By here is a little hedgehog area that the children last year in [class
 134. teacher's name] all of them used to have all the spikes in and there was a real nice
 135. part to look around at and there was a lot more of the triangles going across but I
 136. think they have taken that down. By here I don't particularly like because they have
 137. just been chopping down trees and stuff like that and to be in the Eco-committee
 138. it's not really very nice to see.
 139. MC – Ok, so what would you like to do with this area?
 140. Child 3 – Well I didn't mind them chopping them down because I think they were all
 141. down by here because I can remember trees being by here. I can't remember that
 142. well but that I think they have definitely chopped down.
 143. MC – What do you think they might be able to use it for?
 144. Child 3 – Yeah um, plus sometimes when all the logs over there would rot they could
 145. just get some of them chopped off so I think they may have done that for a reason.
 146. MC – I think you might be right. Right, do you think there is anything else in this area
 147. that you think is important for Forest Schools?
 148. Child 3 – This is another part of the slope. Down there I don't think that that is really
 149. safe because of children coming around here because if they slip through that they
 150. would hit the steps.
 151. MC – Ok, because I can see the fence is a bit broken.
 152. Child 3 – I think we should repair them but it's up to the school to do that.
 153. MC – So what sort of things would you do in the log circle?
 154. Child 3 – Well we would normally sit around the fire and just have a chat and, when
 155. it was in, dark before in the Winter I can remember we come down here, I can't
 156. remember if the fire actually went but we tried making a fire.
 157. MC – Where would you normally sit?
 158. Child 3 – Um, it's not really my choice but I do like to go on this log.
 159. MC - Yeah? Why do you like that one?
 160. Child 3 – Because it's my lucky log.
 161. MC – What makes it lucky?
 162. Child 3 – Well, normally my best friends sit here so it's easier to have a chat and
 163. stuff.
 164. MC – and I notice there are some smaller logs inside, so you know what they are
 165. for?
 166. Child 3 – When we have the fire [class teacher's name] says don't go over this line
 167. so we can't go over the line and that's just to tell the children not to go over that
 168. part.
 169. MC – Ok, so you seem to know that and know not to do that. So when did you learn

Commented [O21]: Theme 8 – Sense of child developing, using knowledge and experience to inform safety

Commented [O22]: Theme 22 – Making reference to FS areas

Commented [O23]: Theme 11 - Knowledge and understanding of whole school

Commented [O24]: Theme 1 – Appreciation of surroundings

Commented [O25]: Theme 6 – Notion of safety

Commented [O26]: Theme 3 – Recall of a past event

Commented [O27]: Theme 4 - Friendships

170. that?

171. Child 3 – Um, when we first started doing Forest Schools.

172. MC – When was that?

173. Child 3 – Um, around Nursery or Reception. In them two years.

174. MC – You are in Year (says year group) now, so Nursery and Reception is a long time

175. ago, but you are telling me that you can remember that that is what you need to do.

176. Child 3 – If you want, I will take you to see the green flag.

177. MC – If you think so that would be lovely.

178. Child 3 – By here is some more to do with plants. I like the view of this school

179. because even though there are lots of cars here we are an eco friendly school and

180. we like looking at the landscapes and everything. Up there is a beautiful landscape

181. that most of the children like to look out the window at.

182. MC – Do you ever do any activities with the landscape.

183. Child 3 – The Eco club do but the other children, not much.

184. MC – Do you think they should do more?

185. Child 3 – Um, yeah, I do think they should get out a lot more with the normal

186. children because the Eco club does a lot outside. By here is the Eco club bird

187. feeders. By here I like this area because again there is another Willow thing and

188. again there is loads more trees trying to be cared and looked after.

189. MC – Who looks after the trees then?

190. Child 3 – Normally [class teacher's name] and the Eco-committee. I'm with the Eco-

191. committee for the whole year so that's giving me a very good experience so I'm

192. ready for the Comp. I think [Headteacher's name] I bet she is chuffed to bits with

193. the Eco club and what they have done because we have earned the Eco flag for the

194. school and we are going to try and keep that responsibility because they can take

195. that back of us.

Commented [028]: Theme 8 – Sense of child developing, ability to recall and retain important information

Commented [029]: Theme 6 – Notion of safety

Commented [030]: Theme 1 – Appreciation of surroundings

Commented [031]: Theme 23 – Learning opportunity

Commented [032]: Theme 1 – Appreciation of surroundings

Commented [033]: Theme 13 – Motivation of school

Commented [034]: Theme 19 – Sense of ownership

Q1. Can you tell me about Forest School?

196. Child 3 – Um, Forest School to me I think is where children can learn more about the

197. outdoors and be around nature.

198. MC – Ok, so learn more about the outdoors so what kind of things might they learn?

199. Child 3 – Um, the life cycle of nature, how animals can help plants and what animals

200. eat and how they feed on oxygen and stuff like that.

201. MC – Ok, so about the plants and the wildlife and things, is there anything else

202. about Forest School that you can tell me about?

203. Child 3 – Um, I think that's it probably.

Commented [035]: Theme 1 – Appreciation of surroundings

Commented [036]: Theme 5 – Sense of being outdoors

Q2. What do you do in Forest School?

204. Child 3 – Um, we um, we went to [Name of outdoor woodland trip] once and that

205. was nice. We learned more about the outdoors down there and it actually gave us a

206. good experience about how outdoors have their life cycles and what they can feed

207. on and again it helped us learn more about the outdoors. |

208. MC – Ok, and anything in terms of when you have been in school what kind of things

209. have you done?

210. Child 3 – Again with Eco club we learned how to keep the outdoors safe and the

211. dangers of being in the outdoors and stuff like that. |

212. MC – I'm wondering if there is anything else that you might do?

213. Child 3 – Habitats, egg habitats.

214. MC – What did you do with that activity then?

215. Child 3 – Um, We got loads of things from the outdoors. We didn't use any string

216. whatsoever, nothing handmade it was all made by the outdoors. |

217. MC – Ok, so what was the task then?

218. Child 3 – We had to build a safe habitat for an egg. |

219. MC – Like an actual egg?

220. Child 3 – Yeah it was a real egg.

221. MC – So did everybody have an egg for themselves?

222. Child 3 – No we worked in partners so there was two people to each group and we

223. had one odd one out so they had three people which made it easier for them.

224. MC – Why was it easier if they had three people?

225. Child 3 – Because one could get all the things the other could find another really

226. good place for an egg and then if the two went off to get some more wood it would

227. be easier for the person working on the habitat to get it done quicker and they

228. would have lots more ideas from the brainstorming.

229. MC – Oh ok, so brainstorming.

230. Child 3 – Yeah to brainstorm ideas as we were doing it.

231. MC – Oh ok, so did you do the brainstorming part first?

232. Child 3 – Well it was sort of in between in parts as well.

233. MC – I'm wondering what kind of ideas you had then?

234. Child 3 – Um, I did say "Why don't we build it in the tree over there because it's a

235. nice little tree with loads of twigs so we could just easily place it in" but my partner

236. [name of child] said "I don't particularly want to do it in a tree I want to do it on the

237. ground" and I was like that 'Oh that means that the fox is just going to come and eat

238. the egg'.

239. MC – So you wanted to place it in a tree and your partner wanted to place it on the

240. ground. How did you manage to decide which one you wanted to do?

241. Child 3 – Well, I did say, well here's a good spot I particularly like and that is the only

242. spot I'd like to do it on the ground because all the other people took my idea for a

243. spot so we agreed to do that so we done it on the ground. |

244. MC – Oh ok, so I guess...

245. Child 3 – That was a tree I said about earlier and I said two people were

246. working on it and I said there was one partner group over there and when I said

247. "Hello [child's name]" her and my friend [child's name] done it over there so me

248. and [name of child] took a spot by there. |We did actually see a beetle so I did have

249. to go like that (gestures) take all the things away so the beetle climbed up the tree.

250. MC – How did you feel when you saw the beetle?

Commented [O37]: Theme 13 – Motivation of the school (Ethos) to provide additional experiences

Commented [O38]: Theme 3 – Recall of a past event

Commented [O39]: Theme 5 – Sense of being outdoors

Commented [O40]: Theme 6 – Notion of safety / no direct reference to FS

Commented [O41]: Theme 1 – Appreciation of surroundings

Commented [O42]: Theme 14 – Key skills, practical, hands on experience

Commented [O43]: Theme 14 – Key skills, listening, creativity, practical/hands on, communication

Commented [O44]: Theme 3 – Recall of a past event

Commented [O45]: Theme 9 – Richness of experience

Commented [O46]: Theme 4 – Friendship / Working together

251. Child 3 – I actually like them and the outdoors and I'm more of a nature person as I
 252. said earlier.
 253. MC – What is it about being outdoors that you like so much?
 254. Child 3 – I just like being around nature and I was born like it and that's why I joined
 255. the Eco committee and telling people about it.
 256. MC – I'm just trying to think what kind of things you like to do when you are
 257. outside?
 258. Child 3 – Actually I like to try and find animals and if I find an endangered animal I
 259. would actually make a real nice habitat for it. Me and my friend, he has loads of
 260. snails in his back garden so we are trying to find endangered animals and we
 261. actually have a small box with loads of soil in and little trees so we um actually try
 262. and, we made like little plants and trees so we put the animal in there and take it
 263. back to his garden and put it in a safe spot that we think will be nice for that type of
 264. animal.
 265. MC – I think that is brilliant. With all the things about habitats you have talked about
 266. and all that you have learned has Forest School helped?
 267. Child 3 – Yes because we have found all the good spots in this school so Forest
 268. Schools have actually helped us with that type of subject that we had to do with um
 269. Science. So it was actually quite nice.
 270. MC – I'm just trying to think if you were doing a lesson about habitats in school, in a
 271. classroom...
 272. Child 3 – Yeah we done that before.
 273. MC – So you've done lessons in the classroom about habitats and lessons outside do
 274. you have a preference?
 275. Child 3 – I prefer the outdoors because again, I'm a nature person back to me and
 276. my friends with the habitat most of the time we don't find the endangered animals
 277. but very rarely we have actually found some animals hurt like birds and we took
 278. them back and he's been taking care of them.
 279. MC – Is that always something you have done?
 280. Child 3 – No, we started it in, um, one of my friends and his friends started it and
 281. then I went up their house one day and I seen them working on it and I asked if I
 282. could help and they agreed. We haven't been doing it much lately but I don't, um, I
 283. have been wondering has he been looking after the animals and if he hasn't I might
 284. put a point to him and say 'These animals have either been hurt or collected them,
 285. they may not be endangered but sometimes animals that you think will never be
 286. endangered are being endangered'.
 287. MC – So why do you think they are all of a sudden becoming endangered then?
 288. Child 3 – Because, have you seen the WWF (World Wildlife Foundation)
 289. programmes? It's poachers and their habitats are being burnt and stuff like that.
 290. Snails I think are kind of getting endangered because people don't care about them
 291. they just stand on them.
 292. MC – Do you think there are snails around the Forest School area you showed me?
 293. Child 3 – Yes I have seen a couple but slugs no.
 294. MC – Do you think Forest School has helped to build this sense of enthusiasm and

Commented [O47]: Theme 1 – Appreciation of surroundings / nature

Commented [O48]: Theme 8 – Sense of child developing, gaining experience

Commented [O49]: Theme 21 – Being a better learner

Commented [O50]: Theme 2 – Cross curricular links - Science

Commented [O51]: Theme 7 – Inside vs. outside

Commented [O52]: Theme 1 – Appreciation of surroundings / nature

295. passion that I feel is coming from you?
 296. Child 3 – Yes a lot. Again, I'm a nature person and it's kind of just given me the
 297. passion to carry on with it. I've been asking my dad, I've been nagging and nagging if
 298. I can adopt an animal like a snow leopard or something like that and he's been
 299. saying "Mate if I had the money I would let you but right now we don't have the
 300. money, if we do get the money you may or if you want you can use your own
 301. money". There is another toy I'm saving up for and I really want it, it's Sentinel
 302. Prime from the new Transformers movie. I've got [says an amount of money] in my
 303. bank and I spent [says an amount of money] on something for my Wii and I have pet
 304. sports and they may not be alive but you have got to take care of them and it's like
 305. Nintendo pets like 'Mushie Monsters' and if your monster dies you have got to
 306. make a new one.
 307. MC – You seem to want to look after things am I right?
 308. Child 3 – I am trying to get my mum to make me a member of 'Mushie Monsters'
 309. because that gives you a chance to collect 'Moshlings' and you can have a greater
 310. responsibility.

Commented [053]: Theme 8 – Sense of child developing, awareness of impact on nature.

Commented [054]: Theme 10 - Influence of home

Q3. Where do you go when you do Forest School?

311. Child 3 – Around the school area and I have been trying to do it outside of school.
 312. MC – So around the school area what places particularly would you say you do
 313. activities?
 314. Child 3 – Again, the log circle and um just with the egg habitats and stuff like that.
 315. MC – You know when you did the egg habitats activity and you were working with
 316. your partner, were you only allowed to use a certain area?
 317. Child 3 – You could choose your area but we weren't allowed past the Nursery and
 318. most of the best spots are past the Nursery so it's more potential to try and find a
 319. really good spot.
 320. MC – So there were some boundaries but you could go and make choices.
 321. Child 3 – Yeah.
 322. MC – How do you feel about that?
 323. Child 3 – I actually thought it helped us with our mind and how you, if you were a
 324. bird to try and find a good spot to look after your children and stuff. Again, it's like
 325. the lion and the cub and how the lion has to look after its cub.

Commented [055]: Theme 5 – Sense of being outside

Commented [056]: Theme 5 – Sense of being outdoors

Commented [057]: Theme 1 – Appreciation of surroundings / nature

Commented [058]: Theme 8 – Sense of child developing

Interview stopped due to lunchtime.

Q4. What do you like about Forest School?

326. Child 3 – All of it.
 327. MC – so when you say "All of it" because all of it might be lots of things so what kind
 328. of things do you like?
 329. Child 3 – Um, probably be um (pauses)
 330. MC – That's ok, you take your time and have a think.

331. Child 3 – Being with my friends and us all working as a team.
332. MC – Yeah? Why is that important to you?
333. Child 3 – Because I think teamwork is the main part of making friends.
334. MC – Ok, is there anything else about the Forest School activities that you like?
335. Child 3 – Um, I can't think of anything else, I've got too many things to choose from.
336. I think the main part is not just working with your friends but as you are working
337. taking care of the nature around you.
338. MC – So I guess if you are taking care of the nature what kind of things would you be
339. doing?
340. Child 3 – Well, not disturbing animals that are working or sleeping or something like
341. that. Trying not to kill any plants and things like that.
342. MC – Again, is this something that you have learned from doing Forest Schools?
343. Child 3 – I've learned working co-operatively with your friends and how you can look
344. after nature and being around nature.

Commented [O59]: Theme 12 – Sense of enjoyment / having fun

Commented [O60]: Theme 4 – Friendships / Working together

Commented [O61]: Theme 8 – Sense of child developing

Q5. What don't you like about Forest School?

345. Child 3 – I like all of it. There is nothing I don't like about Forest School.
346. MC – If I give you a chance to have a little think just in case there is you let me know.
347. Child 3 – Well, this isn't really about Forest School but getting into the equipment is
348. kind of a pain.
349. MC – Equipment ok. Can you talk to me about that?
350. Child 3 – Well um, it's kind of like getting all your wellies on and putting your
351. trousers on and the coat on.
352. MC – Hang on, so you wear wellies, trousers and a coat?
353. Child 3 – Yeah. Waterproof gear. We change our socks as well.
354. MC – So why do you wear waterproof clothes to do Forest Schools?
355. Child 3 – Just in case it's raining you can still go out.
356. MC – Is that a good thing?
357. Child 3 – Yeah because then you can kind of think what the rainforest is like with all
358. the explorers out there.
359. MC – Um, how does it feel when you go out in the rain?
360. Child 3 – I would feel a bit annoyed because Forest School is one of my favourite
361. subjects and I don't really like getting wet unless I'm swimming or something like
362. that.
363. MC – Ok, what about getting dirty?
364. Child 3 – I don't mind getting dirty that's just the fun of going to Forest Schools is
365. you can't stop nature from doing it.
366. MC – So you don't mind getting dirty. Do you think the equipment helps you
367. prevent your clothes getting dirty?
368. Child 3 – Um, sometimes it does but then other times say we were out in the yard
369. now and just about to do Forest Schools and [class teacher's name] thought it was
370. ok and she would just say 'Put wellies on' because that has happened before and
371. you fall over and it's all muddy on the ground.

Commented [O62]: Theme 16 – Positive feeling towards FS

Commented [O63]: Theme 17 – Negative feeling?

Commented [O64]: Theme 27 – Resources

Commented [O65]: Theme 1 – Appreciation of surroundings / nature

Commented [O66]: Theme 29 – Raining vs. sunny

372. MC – How do the wellies feel?

373. Child 3 – They feel comfortable but I'm not that used to it.

374. MC – I'm just trying to think if it had been raining and was quite muddy and you had

375. your wellies, your waterproofs and jacket on as well and you saw a big huge puddle

376. Child 3 – and you think 'I'm going to run in that'.

377. MC – I don't know is that what you would do?

378. Child 3 – My friends do but I probably wouldn't.

379. MC – Why do you think that is?

380. Child 3 – It ain't that sensible.

381. MC – Would you want to do it?

382. Child 3 – I probably would if I was out playing with my friends but in school I

383. wouldn't.

384. MC – Ok, so maybe you would think about things more carefully when you are in

385. school then.

386. MC - What I'm going to do is show you some pictures and there are lots of different

387. activities in these pictures and I want you to have a little look and see if there is

388. anything you have done you can tell me about.

389. Child 3 – I can remember doing most of these at [Offsite Woodland trip].

390. MC – Can you pick out the pictures of the ones you have done?

391. Child 3 – Um, we made something like that, we made a tent.

392. MC – Ok, like a den or something?

393. Child 3 – Yeah, we used hand made things and then sticks just to slot it all in.

394. MC – And how was that activity?

395. Child 3 – It was actually quite fun (smiles).

396. MC – I can see you are smiling.

397. Child 3 – I can remember making something like that in school because we had to

398. make a little shelter. Something like this as well I think we were making something.

399. MC – Yeah? What have they got in their hands in that picture?

400. Child 3 – Um, skipping rope?

401. MC –It's a good try.

402. Child 3 – Oh, it's a magnifying glass. It looks like a skipping rope tied up.

403. MC – What do you think they are looking at?

404. Child 3 – Mini beasts?

405. MC – Is there anything else you can see?

406. Child 3 – Again, that was kind of like making the egg habitat.

407. MC – Oh right, I can see, what have they got in the middle?

408. Child 3 – That kind of looks like um, a little hamster by there and a little hedgehog

409. behind it.

410. MC – What do you think of that as a habitat?

411. Child 3 – It looks like a nice habitat. We didn't think of that but again we don't have

412. that type of material in school grounds really do we. It looks like down [Offsite

413. Woodland trip].

Commented [067]: Theme 8 – Sense of child developing - maturity

Commented [068]: Theme 25 – Risky behaviour

Commented [069]: Theme 15 – Notion of being muddy, wet, dirty – negative feeling?

Commented [070]: Theme 3 – Recall of past events

Commented [071]: Theme 13 – Motivation of the school

Commented [072]: Theme 14 – Key skills, practical, hands on

Commented [073]: Theme 12 – Sense of fun / enjoyment

Commented [074]: Theme 3 – Recall of a past event

Q6. How do you feel when you take part in Forest School?

414. Child 3 – (Pauses) I feel like...actually its giving me the potential to carry on doing
 415. Forest Schools.
 416. MC – Ok, so if you were to think of some feelings what might they look like?
 417. Child 3 – Excited.
 418. MC – Anything else?
 419. Child 3 – Joyful
 420. MC – Ok, what I'm going to do now is put some things out here now different sort of
 421. feelings and emotions and things like that and I want you to just have a little look at
 422. some of them and think about if there is anything that I feel that or that or I don't
 423. feel that and just tell me.
 424. Child 3 – Should I just put the ones I feel in a pile or?
 425. MC – You can pick them one at a time I guess and you can tell me why you feel that
 426. way.
 427. Child 3 – I feel excited because it actually makes me feel I gotta get into it and as
 428. soon as I hear [class teacher's name] say "We're doing Forest Schools" I'm like that
 429. "Yes!" (smiles) |
 430. MC – Yeah? And you have got a big smile like you've got now? Is it just you who
 431. feels like that do you think?
 432. Child 3 – I would say most of them feel a bit sad, (laughs).
 433. MC – Right, why is that?
 434. Child 3 – I don't really know and then others feel confused and then others feel like
 435. that.
 436. MC – How many would you say feel sad or confused?
 437. Child 3 – Five percent of them.
 438. MC – So how many are in your class? Is it about thirty children?
 439. Child 3 – Twenty-eight.
 440. MC – So five percent would be how many do you think?
 441. Child 3 – About eight of them? |
 442. MC – Ok, so eight might feel a bit sad or confused and the other twenty-two would
 443. feel?
 444. Child 3 – Really glad and happy. Most of the time I feel excited and brave. Brave
 445. because normally we are doing new activities and I feel, I just gotta try and push
 446. myself to the limits to do that activity. |
 447. MC – Ok so you want to do your best is it?
 448. Child 3 – Yeah, and then if I have success I feel proud because I've done it right and
 449. I've actually picked it up and then pther times if I've done it wrong I feel a bit
 450. frustrated because I really wanted to get it right. |
 451. MC –When you said you felt proud, how do you know when you have done
 452. something right?
 453. Child 3 – Normally [class teacher's name] would tell us. They would go "Good boy"
 454. or "Good girl" "Excellent" or "Good working as a team".
 455. MC – Is it just [class teacher's name] who makes you feel good about your work?
 456. Child 3 – Sometimes my parents do at home. |
 457. MC – Anybody else?

Commented [075]: Theme 16 – Positive feelings

Commented [076]: Theme 16 – Positive feelings

Commented [077]: Theme 17 – Negative feelings?

Commented [078]: Theme 16 – Positive feelings

Commented [079]: Theme 17 – Negative feelings

Commented [080]: Theme 21 – Being a better learner

Commented [081]: Theme 10 – Influence of parents at home

458. Child 3 – Family and friends.
459. MC – Ok, so brave and excited and proud and frustrated.
460. Child 3 – Yeah frustrated because I got my work wrong.
461. MC – But is it about getting it wrong? I think it's about doing your best perhaps and
462. maybe thinking how you could feel better about things if you were frustrated.
463. Child 3 – Yeah, next time we do that activity push yourself to the limit and try and
464. get it right.
465. MC – So maybe to learn from the things you have tried before? I guess sometimes
466. we can't always do things as well as we would like to.
467. Child 3 – Yeah, you get normally just frustrated and ask your teacher for a chance to
468. do it again. That's if it's like in spelling or something like that. Um, you could do it
469. with Forest Schools i suppose that's if other children got it wrong as well because
470. then you, like say four of you got it wrong, you could split up into pairs and all face
471. each other like in a group so you could just do it by yourself to draw on things.
472. MC – That sounds like a really good idea getting children to help each other to help
473. each other out.
474. Child 3 – Or if you really wanted to you could do it as a group. |

Commented [082]: Theme 18 - Resilience

Commented [083]: Theme 8 – Sense of child developing

Q7. What new things (skills) do you think you've learned from Forest School?

475. Child 3 – (laughs) This one is going to be hard.
476. MC – Yeah? Why is that? Why are you laughing for?
477. Child 3 – I've learned too many things. I can't pick certain ones.
478. MC – Ok, you have a little bit of thinking time like we did before.
479. Child 3 – How to work co-operatively with children. I would say that would be about
480. it. |
481. MC – Just working co-operatively with children?
482. Child 3 – How to make a really good habitat and how to try and improve your
483. outdoor skills and you could get better at your thinking skills your um,
484. communication skills and a lot better at your communication skills.
485. MC – Can I ask a question? When you say "thinking skills" how does Forest School
486. help that area?
487. Child 3 – Because if there are no good places to do it you have got to try and use
488. your imagination to build your own type of habitat out of all rubbish things and help
489. make it a bit better.
490. MC – And how about your communication skills?
491. Child 3 – Because if you are working as a group you have got to communicate and
492. talk to each other.
493. MC – I guess if you are doing a Forest School activity...
494. Child 3 – You are going to use a lot of communication. |
495. MC – Thank you for explaining that for me.

Commented [084]: Theme 4 – Friendships / Working together

Commented [085]: Theme 14 – Key skills, creativity, communication

Q8. What are the best things about Forest School?

(MC noticed that Child 3 was being to appear tired and was conscious not to ask too many questions from this point onwards)

496. Child 3 – Awww...

497. MC – I'll let you have more time to think and help you concentrate.

498. Child 3 – Working with your friends.

499. MC – Working with your friends? Why is that one of the best things for you?

500. Child 3 – Because I just think it helps you working with each other and things like

501. that.

502. MC – Anything else that is a best thing for you?

503. Child 3 – No not really.

Commented [086]: Theme 4 – Friendships / Working together

Q9. What are the least enjoyable things about Forest School?

504. Child 3 – I enjoy all of it. Again, nothing I don't enjoy.

505. MC – Nothing?

506. Child 3 – Nothing at all.

507. MC – Do you want me to give you some thinking time?

508. Child 3 – Nah, that's what you done last time and I couldn't get one thing.

Commented [087]: Theme 16 – Positive feeling toward FS

Commented [088]: Theme 12 – Sense of fun and enjoyment

Q10. What do you think you are better at now you have gained experience through Forest School?

509. Child 3 – (whispers – Oh this is going to be a hard one)

510. MC – That's ok you take your time and think about what you want to tell me.

511. Child 3 – Um, ok. Working in the outdoors.

512. MC – So you're better at working in the outdoors yeah? Anything else you are better at?

514. Child 3 – No, I think that would be all.

Commented [089]: Theme 5 – Sense of being outdoors

Q11. What is the one thing you would tell me about your Forest School experience?

515. Child 3 – It has helped me learn more about the outdoors.

516. MC – Can I ask, if you could think of one word to describe Forest Schools, what would it be?

518. Child 3 – A mind blowing experience.

519. MC – How many words is that?

520. Child 3 – (laughs) four.

Commented [090]: Theme 5 – Sense of outdoors

Commented [091]: Theme 12 – Positive feeling

Appendix 14: Initial codes generated from children's interviews

Theme 1	Appreciation of surroundings / nature
Theme 2	Cross curricular links
Theme 3	Recall of past events
Theme 4	Friendships / Working together
Theme 5	Sense of being outdoors
Theme 6	Notion of safety
Theme 7	Notion of inside versus outside
Theme 8	Sense of child developing – awareness, maturity, experience
Theme 9	Richness of learning experience
Theme 10	Influence of parents at home
Theme 11	Knowledge and awareness of whole school
Theme 12	Sense of fun and enjoyment
Theme 13	Motivation of school (ethos)
Theme 14	Key skills – practical/hands-on, creativity, communication, observation, listening
Theme 15	Being wet, muddy, dirty
Theme 16	Positive feelings
Theme 17	Negative feelings
Theme 18	Resilience
Theme 19	Ownership
Theme 20	Warm up activities
Theme 21	Being a better learner
Theme 22	Areas of importance
Theme 23	Learning opportunities
Theme 24	Difficulty recalling
Theme 25	Risky behaviour
Theme 26	Perceived gender differences
Theme 27	Resources
Theme 28	Not related to the interview question
Theme 29	Raining versus sunny

Appendix 15: Theme of positive feelings based on children's interviews

Q6. How do you feel when you take part in Forest School?

136. Child 1 – I feel excited because we always do like fun activities out there so, yeah I

137. feel excited.

138. Child 1 – (pauses) Happy.

139. MC – Ok, why would you say that one?

140. Child 1 – Because I'm like with all my friends and we always have fun out there.

141. MC – Ok, lovely, anything else?

142. Child 1 – (pauses) I feel pleased sometimes when we go out there because we are

143. going to have fun.

144. MC – So if [class teacher's name] was to come in and say "We are going to do

145. Forest School Activity today" How do you think the class would react?

146. Child 1 – We'd all be pleased because we all like Forest School

Q9. What are the least enjoyable things about Forest School?

170. Child 1 – Nothing really, I like it all.

171. MC – Really? Do you need a bit of thinking time?

172. Child 1 – (shakes head).

Q7. How do you feel when you take part in Forest School?

370. Child 2 – It feels very nice.

371. MC – Are there any other kind of feelings that you can think of?

372. Child 2 – I feel happy and um, it's very fun.

373. MC – Why do you feel happy then?

374. Child 2 – Because it's a good experience and it's really fun.

375. MC – If I was to show you some of these (feeling pictures of faces) and maybe you

376. could pick out some if you felt like that. Which ones might you pick?

377. Child 2 – (pauses...looking at pictures) Happy is one that I feel. The other ones are

378. like, proud.

379. MC – Why would you feel proud?

380. Child 2 – Um, because I'm doing it really well.

389. MC – Is there anything else that you might feel?

390. Child 2 – pauses....thinking...

391. MC – What's that one there?

392. Child 2 – Excited.

393. MC – When would you feel excited?
 394. Child 2 – When we are doing really fun things like playing duck, duck goose and
 395. doing other things.
 396. MC – Yeah? Anything else that you would do?
 397. Child 2 – Mm, like when we build things I feel really excited. Sometimes, there was
 398. this one time that we went out we went to the [offsite woodland trip] we did some
 399. Forest Schools like ours. We talked about, we sat on this really, really big log circle.
 400. MC – How did that feel?
 401. Child 2 – It was like the other tree except it was really, really bigger.
 402. MC – Ok, so was it good that it was different?
 403. Child 2 – Yeah, because there was more logs.

407. MC – Ok, are there any other feelings that you might have?
 408. Child 2 – pauses...
 409. MC – What's that one there you've picked?
 410. Child 2 – Relaxed.
 411. MC – Relaxed? Why would you feel relaxed doing Forest School?
 412. Child 2 – Because it's very nice and I can smell all the beautiful things around.

Q12. What is the one thing you would tell me about your Forest School experience?

570. Child 2 – It is amazing!
 571. MC – Wow, can you tell me why it's amazing?
 572. Child 2 – It is amazing because we get to do lots of fun activities and it's exciting
 573. and gives us all a chance to learn about the outdoors.

Q6. How do you feel when you take part in Forest School?

414. Child 3 – (Pauses) I feel like...actually its giving me the potential to carry on doing
 415. Forest Schools.
 416. MC – Ok, so if you were to think of some feelings what might they look like?
 417. Child 3 – Excited.
 418. MC – Anything else?
 419. Child 3 – Joyful

442. MC – Ok, so eight might feel a bit sad or confused and the other twenty-two would
 443. feel?
 444. Child 3 – Really glad and happy. Most of the time I feel excited and brave. Brave
 445. because normally we are doing new activities and I feel, I just gotta try and push
 446. myself to the limits to do that activity.
 447. MC – Ok so you want to do your best is it?
 448. Child 3 – Yeah, and then if I have success I feel proud because I've done it right and

449. I've actually picked it up

Q9. What are the least enjoyable things about Forest School?

504. Child 3 – I enjoy all of it. Again, nothing I don't enjoy.

505. MC – Nothing?

506. Child 3 – Nothing at all.

Q6. How do you feel when you take part in Forest School?

150. Child 4 – Just happy.

151. MC – You feel happy? What makes you feel happy?

152. Child 4 – Finding um insects that are nice.

172. Child 4 – Friendly.

173. MC – You'd feel friendly? Why would you feel friendly?

174. Child 4 – Because we will have a partner and we will be nice to them and find

175. different things with them and we are not allowed to go without them.

176. MC – Oh right. So you work together with your partner? How does that feel when

177. you are working together?

178. Child 4 – If we are best friends together they would be like me and [name of child]

179. when we are partners we are excited.

239. MC – How did it feel when you were learning new things?

240. Child 4 – I feel like, I feel happy because I'm learning different stuff about nature. I

241. do nature with Daddy and bird looking too.

196. MC – Ok, if I was to show you some of these feelings and emotions which ones, if

197. any, would you say you feel when you do Forest School?

198. MC – What's that one?

199. Child 5 - Excited.

200. MC – Excited, when would you feel excited?

201. Child 5 - When we are all getting dressed and wondering what we are about to do

202. outside.

210. MC – Is there anything else that you might feel?

211. Child 5 - I feel quite happy as well because it's nice to go outside.

212. MC – Ok, is there anything else?

213. Child 5 - Pleased.

214. MC – Pleased in what way?
215. Child 5 - That we are going outside instead of in the classroom.
222. Child 5 - I don't feel angry when I'm up there.
223. MC – No? So if you're not feeling angry what might you feel instead?
224. Child 5 - Happy and excited.
225. MC – Happy and excited yeah,
256. Child 6 – I would feel happy and I'd feel friendly with them.
257. MC – Why would you feel happy and friendly?
258. Child 6 – Because I like to be friends with creatures like I try to be friends with other
259. creatures but they sometimes fly away. I'm a bit noisy I am.
271. MC – Are there any other feelings you might have?
272. Child 6 – Um, what is that one?
273. MC – That one says surprised.
274. Child 6 – Yeah, that one.
275. MC –Why would you be surprised?
276. Child 6 – Because if [name of class teacher] told me that we were going on Forest
277. School for a hunt then I would be excited to go.
261. MC – Did you do that in [Year Group]?
262. Child 7 - Yeah.
263. MC – Have you still got it?
264. Child 7 - Yeah we was able to take it home we was.
265. MC – So you've got it in the house?
266. Child 7 - Can you tell me where in the house in would be?
267. Child 7 - Up in my bedroom.
268. MC – How do you feel when you look at it?
269. Child 7 - Proud.
270. MC – I would think so, that sounds lovely.
288. MC – How does it feel if it's a bit scary going up that hill?
289. Child 7 - Well the first time there was actually like mega scary because I nearly slipped I did.
290. MC – Nearly slipped? Did you slip when you went up the next time?
291. Child 7 - No.
292. MC – Why do you think that was?
293. Child 7 - Because I was confident the second time.
294. MC – You were confident?
295. Child 7 - Yeah.
296. MC – What made you more confident?

297. Child 7 - Well it's because even if something did happen the teacher's would still be there so
 298. it's like still protection.
 299. MC – Ok, so they help you to feel a little bit safe is it?
 300. Child 7 - Yeah.

Q6. How do you feel when you take part in Forest School?

351. Child 7 - Well I do feel really excited because there is a new activity every day to do.
 352. MC - Yeah? So if [class teacher's name] was to come into the class and say we are going to
 353. do a Forest School activity today, how do you think the class would react?
 354. Child 7 - They would probably be shouting like "Yay" and stuff like that (smiles).
 355. MC – Yeah? I could see you smiling there.

360. Child 7 - I'd be surprised if it was a really fun activity like the pendant making.
 361. MC – Ok so you were surprised because?
 362. Child 7 - Because if it's really fun like pendant making or making a tent it would make
 363. me really surprised like because we have never made a tent outside.

369. Child 7 - Happy. Because if we are in groups I'm allowed to work with someone.
 370. MC – Ok, and working in groups is important for you?
 371. Child 7 - Yeah because you can help others and it's like well you can help others so if
 372. they are sad or anything you can help them because you are allowed to work with
 373. them.
 374. Child 7 - Excited because again if it was something like a tent it would be exciting to
 375. like actually make a tent.
 376. MC – Is there anything else? What's that one there you have picked out?
 377. Child 7 - Friendly.
 378. MC – Why would you say friendly?
 379. Child 7 - Because it's again if you are working with someone you can like help them
 380. and stuff like that.
 381. MC – And that's important for you to be able to help people?
 382. Child 7 - Yeah because if you was just like going around being nasty that wouldn't be
 383. good would it so if you're friendly you will never get told off because you will never
 384. be naughty.
 385. MC – So if you are not being naughty what are you doing instead?
 386. Child 7 - I'd probably be helping people and playing nice with them.

218. Child 8 - It feels kind of funny.
 219. MC –Why does it feel funny?
 220. Child 8 - Um, because it looks like all the children are looking for different things to
 221. like for different creatures. We go under the leaves and stuff.

Q6. How do you feel when you take part in Forest School?

248. Child 8 - Nice.

249. MC – You feel nice?
250. Child 8 - It feels good.
251. MC – What makes it nice?
252. Child 8 - Hmmm, I like doing drawing.

258. Child 8 - I like that one because it's happy.

Q6. How do you feel when you take part in Forest School?

1. Child 9 - Um, excited to know what the task will be.
2. MC – Yeah?
3. Child 9 - Yeah.

383. Child 9 - No, I'm not shy any more.
384. MC – Then what would you say you were instead of shy?
385. Child 9 – Confident
386. MC – Has Forest School helped with that do you think?
387. Child 9 - Um, school, school yeah, because we have quite a lot of visitors and like we
388. sometimes have to like talk to the visitors and that's probably made me more
389. confident to talk to people.

401. Child 9 - I do feel happy um, when um, we do get the subjects that I do like, like
402. maths and Forest Schools and stuff like that.

416. Child 9 - ... I'm friendly at Forest Schools.
417. MC – Friendly with?
418. Child 9 - My friends.

Q6. How do you feel when you take part in Forest School?

357. Child 10 - Happy.
358. MC – Why do you feel happy?
359. Child 10 - Um, because I like Forest Schools.

365. MC – So which ones have you picked there? Happy and excited. Why would you feel
366. excited?
367. Child 10 - Because I like Forest School.
368. MC – And Forest School means you do what?
369. Child 10 - Learn stuff outside.
370. MC – So how does it feel when you learn things outside?
371. Child 10 - It's good.

372. MC – You’ve just picked up another one there, what’s that one?
373. Child 10 - Pleased.
374. MC – Why would you feel pleased?
375. Child 10 - Because I’m pleased that [name of class teacher] wants to go out with us
376. on that day.
377. MC – Any other ones that you can see that you might feel?
378. Child 10 - (Chooses another picture)
379. MC - Glad? Why would you feel glad?
380. Child 10 - Because I like Forest Schools.
381. MC – Any others?
382. Child 10 - (Chooses another picture).
383. MC - Do you know what that one says?
384. Child 10 - Confident.
385. MC –Why would you feel confident?
386. Child 10 - Because I like it and I’m confident I can do it.
387. MC – How do you know you’re confident?
388. Child 10 - Because I’ve done it before.
389. MC – Ahh, so you’ve done it before. So is it important you are confident when you
390. do these activities?
391. Child 10 -Yeah.
392. MC –Why do you think that?
393. Child 10 - Because if you weren’t very confident you might get everything wrong.

Appendix 16: Focus group transcript with additional notes

Questions for parents

Ice breaker – inviting parents to introduce themselves and say something about them.

1. Researcher – Q1. What is your understanding of the Forest School initiative?

2. Parent 1 - Um, basically taking the classroom outside and placing them in a
3. different learning environment and learning about nature and other aspects like
4. that I think. Oh and the community

5. Parent 2 – Exactly the same, I was going to say exactly the same as you. Yeah,
6. just taking them out and making them more aware of the environment more than
7. in the classroom.

8. Parent 3 - I was going to ask you what it was altogether because I only get little
9. bits from my sons/daughters, it's very limited.

10. Researcher – I think that that is the reason for asking that question really is
11. gauge your understanding is of Forest School and how much information may
12. have been shared by children and staff. It is good for me to get an idea of where
13. you, as parents, are coming from really, rather than me telling you what I think.

14. Parent 4 - In my house there are four children so when they came home they
15. would be like “guess what we’ve done today” and there was quite a discussion
16. about what they were sort of doing. It’s nice to know that they can go out and
17. look at nature things and whatever but nice to know that they are in a safe
18. environment. I don’t know one berry from another and don’t like creepy crawlies.
19. It’s nice to know they have an appreciation because I think sometimes because
20. we live, sort of, in the country we take for granted the lovely views and all the
21. greenery that we have around here.

22. Parent 5 – Yeah, I’m exactly the same. My understanding is that it is taking the
23. classroom outside but in my situation, my child hates school, it was something to
24. get him/her here so he/she’s more than willing to come on those days because it
25. was taking him/her out of the classroom so he/she didn’t have the intimidation of
26. the classroom so he/she’s learning because he/she will say to me “Oh Mam this
27. is...” and when I ask where did you learn that to? He’ll be like “Oh Forest School”
28. so I think right, fine, so that’s my understanding of it anyhow. The bits that he/she
29. tells me.

Consensus amongst five parents present that their understanding has come from their children.

30. Researcher – Q2. What activities has your child told you about doing in Forest School?

Commented [O92]: Notion of learning taking place outside the classroom – construction of classroom used – restrictive?

Commented [O93]: Change in the learning environment – notion of environment being fixed.

Commented [O94]: D. Learning – specific to nature

Commented [O95]: Community of the class / school?

Commented [O96]: Agreement of understanding

Commented [O97]: Notion of being outdoors / outside

Commented [O98]: H1. Awareness – “more aware” are children not aware when in the classroom?

Commented [O99]: Willingness to share information for this family?

Commented [O100]: Opposite to the above view, willingness to share – opportunity provided at home?

Commented [O101]: Parent feels reassured with this type of approach to learning, also “safety” appears an important element for this parent.

Commented [O102]: I2. Sense of children showing an appreciation – perception children and parents take for granted their surroundings.

Commented [O103]: Agreement

Commented [O104]: Taking classroom ‘outside’ – link to line 2, construction of classroom – dichotomy between inside (work) / outside (freedom)??

Commented [O105]: Forest School acting as a motivator – construction of ‘intimidating classroom’ – formal learning?

Commented [O106]: G1 - Approach of FS supporting the learning for this pupil?

Commented [O107]: Willingness to share learning/experiences within a home context?

Commented [O108]: Information of the rationale for FS not communicated to parents??

31. Parent 2 - They walked to the park the other day mine did.

32. Parent 1 - My parents live on a farm so my children get a great deal outside and
33. creepy crawlies and nature and everything so to them it's great to get out of the
34. classroom, the oldest can be hyperactive, but to them there is just this, another
35. exploration of learning which is great for them but there is no novelty in what they
36. are learning because they are so used to it.

Commented [O109]: Exposure to outdoor environment at home – notion of great to “get out” of the classroom.

Commented [O110]: Assumption of learning experience not being ‘novel’ for children. Embedded approach within school / home?

37. Parent 5 - My son/daughter doesn't tell me anything with school. I have to ask
38. Him/her every day “What did you do?” or I learn from other parents and they do
39. say “Oh yeah, did [name of child] tell you about this today?” “No” [laughs] but
40. then he/she will drop it in to conversation sometimes saying “We’ve done that
41. last week”. I mean, we have a caravan in **** and we are always down there
42. and he/she is always into, you know, look at that because the back of the
43. caravan backs onto a hedge and there is mice and there is birds and he/she is
44. always saying “You can't touch that because that's” “How do you know that?”
45. “Because we did that in Forest Schools”. He/She loves it outside, he/she'd rather
46. be out than in, all the time. I think where you have got children that are just
47. constantly on computers or what have you this is good for them to think ‘Oh
48. yeah, there is more than in your bedroom on your Xbox’ you know, to get out and
49. about.

Commented [O111]: Child separating home from school. Willingness to share information at home?

Commented [O112]: Learning is related on the child's own terms. “Caravan” – opportunity for child outside of school. Awareness of surroundings - observation skills.

Commented [O113]: Child enjoys outdoors – due to exposure at home and in school?

Commented [O114]: Competing with technology - trying to keep children in, takes learning outside.

50. Parent 4 - [Name of child] likes bugs. “These have so many legs” and “did you
51. know...” he came home the other day and there was a spider on the wall and it
52. had a white spot on its back and he said “That spider's pregnant” and I said “How
53. do you know that?” “It's got a white back” he said, and off he trotted, I then just
54. went and googled that [laughs].

Commented [O115]: Knowledge and understanding – interest – learned/developed through FS?

55. Researcher - Is that something he has learned himself?

56. Parent 4 - He/She does like bugs, he/she also loves the suits that they wear
57. (agreement from other parents). Something about the smell of rubber that I don't
58. really get [all parents laugh] because I've seen them, saying “You look like
59. Oompa Loompas” “Oh no, they are really comfortable and you can't get wet” you
60. know. My eldest son, he's very particular, he doesn't normally like getting dirty,
61. but with the Forest School things he says “Oh we picked up this and we had a
62. worm” and I'm thinking “Urghhh”.

Commented [O116]: Reference to uniforms children wear during FS – children like them.

Commented [O117]: Dissonance between behaviour during FS and at home?

Another parent joins the Focus Group (Parent 6)

63. Parent 4 - With [name of child] the suits and the wellies are almost like a
64. superhero costume because he/she thinks no germs can hurt me.

Commented [O118]: Positive barrier – uniforms provide support and reassurance for this pupil.

65. Parent 2 - Like Parent 4, It drops into conversation, normally bedtime is when it
66. kicks in. He/She likes the suits, I don't know what it is but he/she thinks the suits
67. are really cool and the wellies and everything. The log circle, that's what comes
68. up a lot and also, they toasted marshmallows or something and that was the one
69. thing that he/she really, really liked about it. The trees, you know, you can chop
70. the tree down and count the rings, that's come into conversation as well.

Commented [O119]: Suits provide added element – something different, unique.

Commented [O120]: Log circle - importance for child. Memorable learning experience – toasting marshmallows.

Commented [O121]: Knowledge and understanding – sharing knowledge at home.

69. Parent 6 – [name of child] is an outdoor sort of boy/girl anyway. He/She loves
 70. nature. Whenever we go on bike rides I take him/her down the canal path
 71. towards ** park and he/she absolutely adores that. He/She likes the, and I'm not
 72. sure if it's to do with Forest Schools or to do with Cubs and Beavers, but he/she'll
 73. say "Oh Dad, what tree is that?" "I don't know [name of child]" and he/she takes
 74. great pleasure in telling me what tree it is. We picked him/her up from the Scout
 75. hut the other day and there was a big spider outside and a lot of the mums were
 76. like "Ohh a spider" but he/she was there, "It's part of nature, lets pick it up and
 77. put it back into the grass" and things like that. I haven't discussed it in a great
 78. deal of detail with him/her I'll be honest, but, um, I do know that he/she
 79. thoroughly enjoys it [Forest School] and he/she loves anything to do with the
 80. outdoors.

Commented [O122]: Willingness to learn / share information at home.

Commented [O123]: Safety for wildlife – awareness of nature.

Commented [O124]: Sense of enjoyment for child of being able to be a part of FS experiences.

81. Researcher - Thank you for sharing that. It would seem that everyone has talked
 82. about different experiences. Sometimes things aren't shared immediately, but
 83. perhaps children might drop it in or something might trigger a memory or
 84. experience they will be able to recall.

85. Researcher - **Q3. What do you think of the Forest School initiative?**

86. Parent 1 - I think it's positive because, one of the things that children get stuck in
 87. today, my oldest son his concentration is like a fly, you know it's literally there
 88. one minute and gone the next minute because he's thinking of the hundred other
 89. things that he wants to be doing. I think the great thing about Forest School is
 90. that they are taken outside where there is a lot of things that could be happening
 91. around them that requires them to concentrate that little bit more as well. So I
 92. think it helps in their learning in that respect as well as learning all about nature. I
 93. mean I love nature so I think, I think possibly like in our children now they are
 94. quite spoiled for where we live so, maybe the nature part of it comes naturally to
 95. our children, rather than a city where it wouldn't so much. But I think as a
 96. learning tool, to be able to come out as a group and behave responsibly in a
 97. different environment outside a classroom and concentrate on something else
 98. when there are lots of other things happening around you has got to be beneficial
 99. to any child.

Commented [O125]: Notion of being outside – exposure to different types of experiences – emphasis on concentration/learning. Approach allows them to focus?

Commented [O126]: Children being spoiled / take surroundings for granted? Generalisation made by parent.

Commented [O127]: Opportunity of learning in a different environment, in groups, exposure to lots of things happening in surrounding environment – Seen as positive for all children.

Commented [O128]: Shared consensus

[Agreement from all parents – nods, Mm hmm, absolutely]

100. Parent 5 - I think sometimes they learn things and they don't realise they are
 101. learning.

Commented [O129]: Implicit learning?

102. Parent 1 - Yeah, that's the best way to learn.

103. Parent 4 - Sort of trick them into it [laughs].

104. Parent 2 - I think with practical work you know you are outside and
 105. experimenting or doing whatever, you remember that. They don't realise that in
 106. weeks to come, "Oh yeah, we did that in Forest Schools".

Commented [O130]: Importance of direct/hands on learning approach – Implicit learning – parent feels the context of learning would not be attributed to FS.

107. Parent 4 - It's hand-on isn't it.

Commented [O131]: Practical learning / direct experiences.

108. Parent 2 - I think that the majority of us have got boys/girls, it's great. They are

109. getting dirty and they love, they like to see how things work. With my
 110. son/daughter, the first thing he/she does with anything is turn it upside down, a
 111. car, chair, table, anything he/she will want to see how it works. I've just taken up
 112. doing photography now, and I don't know if you have noticed but there are
 113. spiders everywhere and they are huge. I've been taking photographs and
 114. zooming right in and then put them on the computer and he/she's like "There's
 115. hairs on the spider's legs" and he/she's fascinated by it which, as has been
 116. said, anything to do with outdoors, get them out of the house, in my eyes it's
 117. fab, I can't fault it.

Commented [O132]: Inquisitive approach to learning.

118. Parent 6 - I think the problem that we've got as parents compared to our day
 119. when we were kids is the amount of technology that is available to kids now is
 120. designed to keep them indoors. So anything that pushes them out, as parent 1
 121. said into a different environment has got to be a good thing.

Commented [O133]: Richness of experience at home / supporting learning.

Commented [O134]: Appreciation of the benefits for children from being exposed to outdoor environments.

122. Researcher - I noticed many things through the interviews with the children and
 123. from my past experience of Forest School.

Commented [O135]: Outdoors vs Technology.

Commented [O136]: Children benefit from exposure to different environments?

124. Parent 3 - Concentration is a learning skills in itself, isn't it. It's not something
 125. all children are born with, it's something that develops through them. So if you
 126. can give them, so it's probably one of the beneficial tools for them to have when
 127. they go to Comprehensive. So anything that helps them to develop their
 128. concentration and focus and motivating them...is great really.

Commented [O137]: Something that needs to be developed.

Commented [O138]: Looking to future – emphasising the importance of being able to focus/concentrate.

Commented [O139]: FS as a vehicle to develop concentration and motivation – perceived as a positive.

129. Researcher – I know the log circle that was mentioned earlier, seems to be the
 130. focal point for their learning and where it is reinforced.

131. Researcher – **Q4. What do you think your child feels about taking part in**
 132. **Forest School?**

133. Parent 2 - Excited, I don't think they realise they do feel anything. They just go
 134. with it.

Commented [O140]: Dissonance – Assumption children don't feel??

135. Parent 1 - They don't see it as a privilege though ours [some parents laugh].

Commented [O141]: "Privilege" – sense children take FS for granted?

136. Parent 2 - There is a local park scheme that they go to twice a week and they
 137. all go to that, they are all outside and are all starting to be given that
 138. responsibility of going there on their own as well because they are just growing
 139. up so fast and they don't think of it as different because they are always
 140. outside, they are always outdoors. Ok, they may be playing sports and aren't
 141. doing as much nature things in the park, but I think they know that it's there,
 142. they are aware of what is going on and they know about the little swampy areas
 143. so they won't go in there because it's swampy. They know all the little nooks
 144. and crannies of where they can play and I think that for them to be able to work
 145. outside in school is great but I think that they don't really realise that it is a
 146. privilege as such.

Commented [O142]: Children always being outside / outdoors – Adult perception of this being the 'norm' for children.

Commented [O143]: Awareness and understanding of areas – implicit.

Commented [O144]: Parent values the opportunity of working outdoors in a school context – but does not feel children see this as a privilege.

147. Parent 6 - I know [name of child] is enthusiastic about it but, I agree, I don't
 148. think he/she sees it as anything special.

Commented [O145]: Children perceive FS as part of school curriculum – no different to other subjects?

149. Parent 3 - No, I think we are very lucky that we live in this area. If this was in an

Commented [O146]: Appreciation of where they live – positive environment for children.

150. inner city school and they were being taken to a local park or whatever, they
151. would be so excited and they would come home and say “We did this today,
152. and we did that today” but I think we are quite lucky.

153. Parent 5 - It's just the norm for them [other parents agree - Yes]

Commented [O147]: Sense of FS opportunities are what the children have grown up with.

154. Researcher – I noticed a lovely log train that the children showed me and the
155. view really is spectacular

156. Parent 6 - Yeah, but then we do take it for granted. If it's on your doorstep it
157. becomes everyday then.

Commented [O148]: Parents also take surroundings for granted – lack of appreciation?

158. Parent 2 - I think they like the practical side of it. If they are doing an experiment
159. or building something they think that's great. Boys like to be building things and
160. in school you are giving them that opportunity to do the task because when you
161. are at home, my child is always with his grandfather, and he's always building
162. things and he's there with his hammer, got his overalls on and he loves it. I
163. think that, you know, in school I think the only thing that is different is that they
164. are given tasks to do.

Commented [O149]: Hands on, practical opportunities for children.

Commented [O150]: Learning opportunities supported at home.

Commented [O151]: Lack of understanding of FS approach?

165. Parent 1 - I would hope as well mind that because there is a different
166. environment that you would get children who are maybe more timid in the class
167. and this would give them the chance to speak out as well. Because it's a
168. different environment it would hopefully encompass all the children in the class
169. rather than just the mouthy ones [parents laugh].

Commented [O152]: FS provides opportunities for inclusion / all pupils can benefit.

170. Researcher - Perhaps sometimes children do not always react how we think
171. that they will.

172. Parent 3 - They have got a working together class here on a Wednesday
173. afternoon, and we've come down here for two weeks. Um, just to see them...
174. they are totally different. When they are here they seem to be...you know,
175. they've got their school head on and they are totally different. Not totally
176. different, but they are different to the way they are at home.

Commented [O153]: Children behave differently at home to in school.

177. Researcher – **Q5. Which elements of Forest School does your child enjoy?**

178. Parent 6 - Have you got any categories? [Parents laugh]

179. Researcher - Possibly in the type of activities children might experience or what
180. they might feel they get a lot out of.

181. Parent 1 - Team building I think is very good. They have to have that for their
182. whole life. So if they start it now then it is a good thing to do outside.

Commented [O154]: Team building seen as an important skill.

183. Parent 2 - Also if a child doesn't like school so much then this would be a good
184. time to work in a smaller group.

Commented [O155]: Different style of learning to classroom? Small group tasks?

185. Parent 5 - My child says “It's Forest Schools” and you can see that he/she
186. thinks it's not so bad today and I'm not in the classroom. It's easier to get

187. him/her here on those days.

Commented [O156]: FS approach may be more suitable for this pupil than more formal classroom learning.

188. Parent 1 - I think that from a parents' perspective, I remember when it came in
189. years ago when my child was in Nursery I think, and my initially instinct was 'oh
190. right, they are just giving up the classroom and they are allowed free time and
191. no learning' so I think it would be nice for the parents to be involved in knowing
192. what the learning objectives were with Forest School so you could carry on with
193. that at home maybe more. Although not knowing the learning objective is not
194. necessarily bad because sometimes the children absorb more when they don't
195. know what they are learning about but it would be nice for us to be able to back
196. it up as parents. It's another way to enforce communication isn't it.

Commented [O157]: Communication lacking? Shows the FS approach has been running for a number of years.

Commented [O158]: Parents would like to reinforce more specifically at home – are more informal opportunities more important than school's focused objectives?

Commented [O159]: Limited understanding of FS approach – Always a focus/purpose/ reason behind the learning.

197. Parent 4 - We do get a brief outline.

198. Parent 1 - We get a sheet at the beginning of the term, I'll look through that at
199. the beginning of the term. I don't put it up on the wall and say 'this week...we're
200. doing this' because we don't know when they are going to do it.

201. Parent 6 - Parent 2 touched on it earlier, its more hands-on for them rather than
202. the theory in the classroom.

Commented [O160]: Practical approach is valued by parents.

203. Parent 3 - Just from doing things more practically, those things stick in your
204. head.

Commented [O161]: Benefits of practical learning – provides memorable learning experiences.

205. Researcher - It's giving the experiences and encouraging their exploration.
206. Sometimes it can be difficult to explore and investigate in a classroom context.

207. Researcher - **Q6. Which elements of Forest School does your child find
208. difficult?**

[Consensus that they did not feel they would find anything difficult].

209. Parent 1 - I always say "Do you realise how lucky you are?" because we just sat
210. at a desk didn't we and didn't move and you know, I say "I wished my school
211. was like this" but they don't see it, to them it's the norm.

Commented [O162]: Parent recalling own experiences – positive that their children are having experiences they did not have – feels children take this for granted.

212. Researcher – **Q7. What skills do you feel your child has learned?**

213. Parent 2 - I think that they are more aware. They will look at things slightly
214. differently. We have got this place down in **. We will always go down to the
215. beach or we are always doing this or that and he/she will say about this in the
216. water...maybe he/she hasn't learned about this in the Forest group but the way
217. of thinking, [name of child] might not talk about it as much but it will just pop out
218. and they will say "We did that", they might not even say if they've done it in
219. school. I'll ask "How do you know that?", "School".

Commented [O163]: FS helps to develop awareness in children?

Commented [O164]: Outdoor learning supported at home.

Commented [O165]: School/FS allows them to think creatively? Observational skills.

220. Parent 6 - My child has always been a nature loving, outdoorsy kid and I think it
221. [Forest Schools] has helped develop that it pushed it a little bit further.

Commented [O166]: View FS approach as positive – encourages and develops interests.

222. Parent 4 - Context driven.

223. Parent 6 - [name of child] is looking for things, looking for things around canals
224. and wildlife saying let's look at the little ducklings there or I just saw a squirrel
225. climbing up a tree and I'm just walking along or he/she'll say let's stop by here
226. and see if we can find anything in the hedgerow and this (Forest Schools) has
227. definitely developed this.

Commented [O167]: Observational skills – awareness of surroundings – willingness to share – Parent's perception of FS developing this interest.

228. Researcher - It sounds like he/she wants to share his/her interest.

229. Parent 1 - I'm just thinking, my child said that apparently down ** park there are
230. a lot of birds, kestrels or something, he/she said that the other day.

231. Parent 4 - My child isn't an outdoorsy type at all. He/She loves watching nature
232. programmes on the television. The other day he/she was looking out of the
233. window and he/she shouted "Mam, come here quickly. Look there's a rabbit"
234. and he/she was stood there watching three little rabbits and he said "I've never
235. seen a rabbit before" he/she watched them and he/she was there for about
236. twenty minutes, he/she was rooted.

Commented [O168]: G - Learning opportunities – memorable first experiences, wanting to share this with parents.

237. Researcher – Those first experiences can have such an impact on children.

238. Parent 2 - Children don't forget, if they are going somewhere and they have
239. been there before, they'll know they've been there before. It amazes me
240. sometimes, their memory is amazing.

Commented [O169]: Developing memory – children's ability to remember past experiences.

241. Parent 1 - Talking about memory I think that's probably a good thing about
242. Forest School like was said before is that they are not conscious that they are
243. actually learning. In their classroom environment they are aware that they are
244. learning so they either switch on or switch off whereas in the forest environment
245. they will be learning because they are involving themselves.

Commented [O170]: Assumption of implicit learning.

Commented [O171]: Direct experiences may lead to more memorable learning experiences?

246. Parent 3 - I think they know they can take that outside of school and put it into
247. another context as well.

Commented [O172]: Transferable skills between different contexts – school / outdoors / home.

248. Researcher – it seems as though, for children, being outside is different?

249. Parent 1 - If you can make it as fun and enjoyable for them in whatever context
250. you can and make them want to learn then you are on the right track.

Commented [O173]: "Fun and enjoyable" makes the learning experience more memorable?

251. Parent 2 - I think like any profession, if you are a doctor, a teacher, any
252. profession hands-on experience is the one that will always live with you. No one
253. wants to do the theory side of it, the write up of reports and things like that...

Commented [O174]: Importance of hands on experience – learning through doing.

254. Parent 1 - Unless the theory is relevant though, if you are a doctor and you've
255. just diagnosed someone then the theory becomes relevant, which is what this is
256. all about.

Commented [O175]: Theory underpinning initiative? Underpinning learning objectives? Hands on learning?

257. Parent 6 - A change is as good as a rest. If you drag them out of the classroom
258. for a couple of hours into a different environment, whilst we have all talked
259. about learning, but, it gives them that change from the norm which will stick
260. with them and maybe grabs their interest a bit as well.

Commented [O176]: Notion of 'dragging' outside the classroom – fixed place? FS can provide a change in approach which can be memorable?

261. Researcher – **Q8. Can you give any examples of how the Forest School initiative has had an effect on your child's learning?**

263. Parent 6 - What would be nice, is if he/she offered to help in the garden a little
264. bit more following Forest Schools [laughs].

265. Parent 1 - My child did ruin my cooker by trying to melt marshmallows.

266. Parent 5 - I think they quite like it when they are telling you something because
267. they then become the teacher's don't they and they think it's fantastic. For them
268. to teach you something, well, sometimes my child is teaching me things and
269. they think that's fab that I didn't know it.

Commented [O177]: Child's willingness to share what they have learned.

270. Parent 1 - Mine have always been aware of bugs but they are really, really
271. aware of bugs now. They look at things and tell me what they are. They never
272. want to hurt anything though. If they collect anything they will want to set it free.

Commented [O178]: Greater awareness – sense of not wanting to hurt things – appreciation of nature.

273. Parent 3 - We had one of the big house spiders the other day. I put the card
274. underneath the glass and my child spent ages just looking at it. They have
275. never killed anything, even from a little age they like to see them run around
276. and that.

Commented [O179]: Appreciation of nature – sense of awe and wonder?

277. Parent 2 - My child says "You must not hurt anything" I don't know whether that
278. has come from my child or from school.

Commented [O180]: Appreciation of nature

279. Parent 6 - It's (Forest School) developed it, taken it a little step further.

Commented [O181]: FS has developed their appreciation?

280. Researcher – **Q9. In what ways do you think the Forest School initiative has had an effect on your child's development?**

282. Parent 5 - It encouraged them to look at things differently I think. In everyday
283. life, the majority of them are outdoor children but it's not something that is
284. different for them. So it encourages them to look at things differently, I don't
285. think it's changed them as such because they are outdoors anyway but it has
286. made them more aware of things. So they know what certain things is, rather
287. than to think of it as a tree or a bug, they know that that tree is whatever and
288. you know...a sycamore.

Commented [O182]: Greater appreciation of nature / observational skills – but not seen as anything special/unique?

Commented [O183]: Dissonance – not changed them but has increased their awareness.

289. Parent 6 - It gives them that opportunity to take it that step further as well
290. doesn't it. I mean if you didn't have something like this in place...how would they
291. develop that? By the children being lucky enough to be able to participate in
292. something like that it is that opportunity to develop it and take it that stage
293. further and to encourage the interest and keep it alive.

Commented [O184]: FS provides an opportunity to develop appreciation and understanding of nature and surroundings.

Commented [O185]: Sense of children being 'lucky'. FS develops and encourages children's interests – nurtures it?

294. Parent 1 - I think for my child as well, he/she's a child that doesn't like to sit still
295. for very long. So for him/her, particularly something like this enforces his/her
296. learning ability and he/she is getting better as he/she has got older. Anything to
297. be on the move and still doing things whilst still learning and then putting them
298. back in the classroom helps I think...that break. I think the responsibilities,
299. maybe that they are given, because he/she loves to be responsible, when they

Commented [O186]: Developing Child - FS has supported this child in developing a greater focus?

Commented [O187]: Outdoor learning experiences can be used to support classroom based learning.

300. are in teams and responsible, I think again it's really good because he/she is so
301. bossy that sometimes you have to listen to other people in a team. He/She's
302. improved in school through it so this must help in that respect as well.

Commented [O188]: Importance of teamwork – working with different peers.

303. Parent 6 - It's exposure isn't it. Giving them the opportunity to explore different
304. scenarios, different situations, so I certainly think it's beneficial.

Commented [O189]: Parent feels that FS has supported their child's improvement in school.

Commented [O190]: FS provides a different context for learning to take place – exposure to different learning opportunities.

305. Researcher - Is there anything else you feel has helped their development?

306. Parent 6 - I think my child is more likely to recall something in Forest School
307. than what he/she did in class yesterday.

Commented [O191]: FS can provide a more memorable learning experience.

308. Parent 2 - I think they will tell you, we have days when we can tour the school
309. and stuff like that and we will go around and they will say "Well we did that", and
310. that's something they might have done in Year One and they will remember that
311. we built those or even tell you that Year 6 built them and that might have been
312. four or five years ago. They do very specifically remember.

Commented [O192]: Memorable experiences – recall. Importance of school surroundings and sense of community "We did that?"

313. Parent 3 - If we were to go home today and ask my child what he/she did in
314. school last year he/she would say no. If he/she took me around the school then
315. he/she would say "Oh yes, we did this and that" because he/she's outside, it's
316. all coming back to him/her and you remember.

Commented [O193]: Learning in context.

317. Parent 6 - It's nice to have the opportunity to give them those memories to do
318. these things. We didn't do these things when we were in school. To give them
319. those opportunities I think is brilliant and it can only add value to their
320. education.

Commented [O194]: Parents did not have opportunities like FS. They seem to value the opportunities that FS can provide for their children's education.

321. Parent 1 - They've just got to learn how to do maths outside now isn't it,
322. (laughs).

Commented [O195]: Maths perceived as fixed – learned within the classroom.

323. Researcher – **Q10. What effect have these skills that they have learned had
324. on the home environment?**

325. Parent 6 - For me, it's developed the interest that my child already had there.
326. We go away a lot and like to be outdoors and lighting campfires and things like
327. that. [name of child] often wants to build a den in the woods etc... and I think it
328. has, I keep repeating, but it's developed his/her interest.

Commented [O196]: FS has helped to develop the child's interest.

329. Parent 6 - As parents, it also gives us more opportunities to have
330. conversations about how they know this and it's another enabler for us.

Commented [O197]: Provides a way in for parents to talk about school, what children have learned.

331. Researcher - A way in to have those conversations...

332. Parent 3 - Again, I think because it's outdoors, doing nature it's not like the
333. equation of blah blah which they might think is boring. If you are outside and
334. you say "How did you know that?" They will then go into depth about it.

Commented [O198]: "Outdoors" - Learning in a different context may provide more stimulating experiences?

335. Parent 4 - With my family, because they are all different ages, they will have a
336. group discussion about it. My youngest is in Year One and if they are having a
337. discussion about nature, nature at any level is for everybody and it's something

338. they can all appreciate.

Commented [O199]: "Nature is for everybody – they all appreciate it" – Awareness and understanding.

339. Parent 1 - It makes our children, like, we went through an era a while back
340. where children would go outside and they would say I'm bored. I can honestly
341. say, whenever my children are in a field that they are never bored. They can
342. find something, dig it, climb it, hold it, build it whatever. Whereas maybe this is a
343. help because our children are still the generation of the computer and the tele,
344. so there must be something good in this.

Commented [O200]: Beneficial for children to have exposure to outdoor environments – parents battling against "computer generation" – value children being able to learn / do things outdoors.

345. Parent 2 - Forest School is no different to them than Maths or PE now. It's the
346. norm.

Commented [O201]: Not perceived as different for children – "the norm"

Appendix 17: An example of parent's comments organised into themes

Themes for Question 2

Main Themes	Sub-Themes
D. The classroom 'outside'	D1 – Parents value opportunity of FS
	D2 - Importance of 'outdoors'
	D3 - Computer age generation

D1 – Parents value opportunity of FS

1-2 "basically taking the classroom outside and placing them in a different learning environment"

(P1 - Change in the learning environment – notion of environment being fixed.)

16-18 "It's nice to know that they can go out and look at nature things and whatever but nice to know that they are in a safe environment."

(D1, H2) P1 - Parent feels reassured with this type of approach to learning, also "safety" appears an important element for this parent.

24-26 "my child hates school, it was something to get him/her here so he/she's more than willing to come on those days because it was taking him/her out of the classroom so he/she didn't have the intimidation of the classroom"

(P1 - Forest School acting as a motivator – construction of 'intimidating classroom' – formal learning?)

79-80 "I do know that he/she thoroughly enjoys it [Forest School] and he/she loves anything to do with the outdoors".

(P3 - Sense of enjoyment for child of being able to be a part of FS experiences.)

127-128 "anything that helps them to develop their concentration and focus and motivating them...is great really."

(D1, G2) P4 - FS as a vehicle to develop concentration and motivation – perceived as a positive.

165-169 "I would hope as well mind that because there is a different environment that you would get children who are maybe more timid in the class and this would give them the chance to speak out as well. Because it's a different environment it would hopefully encompass all the children in the class rather than just the mouthy ones"

(P5 - FS provides opportunities for inclusion / all pupils can benefit.)

149 “No, I think we are very lucky that we live in this area.”

(P5 - Appreciation of where they live – positive environment for children.)

185-187 “My child says “It’s Forest Schools” and you can see that he/she thinks it’s not so bad today and I’m not in the classroom. It’s easier to get him/her here on those days.”

(P6 - FS approach may be more suitable for this pupil than more formal classroom learning.)

209-211 “I always say “Do you realise how lucky you are?” because we just sat at a desk didn’t we and didn’t move and you know, I say “I wished my school was like this” but they don’t see it, to them it’s the norm”

(D1, F, I2) (P6 - Parent recalling own experiences – positive that their children are having experiences they did not have – feels children take this for granted.)

220-221 “My child has always been a nature loving, outdoorsy kid and I think it [Forest Schools] has helped develop that it pushed it a little bit further.”

(P7 - View FS approach as positive – encourages and develops interests.)

246-247 “I think they know they can take that outside of school and put it into another context as well.”

(P7 - Transferable skills between different contexts – school / outdoors / home.)

249-250 “If you can make it as fun and enjoyable for them in whatever context you can and make them want to learn then you are on the right track.”

(P7 - “Fun and enjoyable” makes the learning experience more memorable?)

291-293 “By the children being lucky enough to be able to participate in something like that it is that opportunity to develop it and take it that stage further and to encourage the interest and keep it alive.”

(D1, F, I2) (P8 - Sense of children being ‘lucky’. FS develops and encourages children’s interests – nurtures it?)

301-302 “He/She’s 302. improved in school through it so this must help in that respect as well.”

(P9 - Parent feels that FS has supported their child’s improvement in school.)

303-304 “It’s exposure isn’t it. Giving them the opportunity to explore different scenarios, different situations, so I certainly think it’s beneficial.”

(D1, G1) P9 - FS provides a different context for learning to take place – exposure to different learning opportunities.

317-320 "It's nice to have the opportunity to give them those memories to do these things. We didn't do these things when we were in school. To give them those opportunities I think is brilliant and it can only add value to their education."

(P9 - Parents did not have opportunities like FS. They seem to value the opportunities that FS can provide for their children's education.)

325-328 "For me, it's developed the interest that my child already had there. We go away a lot and like to be outdoors and lighting campfires and things like that. [name of child] often wants to build a den in the woods etc...and I think it has, I keep repeating, but it's developed his/her interest."

P9 - FS has helped to develop the child's interest.

D2. Importance of 'outdoors'

2 "Classroom outside"

P1 - Notion of learning taking place outside the classroom – construction of classroom used – restrictive?

6 "...taking them out..."

P 1 - Notion of being outdoors / outside

22-23 "My understanding is that it is taking the classroom outside"

P1 - Taking classroom 'outside' – link to line 2, construction of classroom – dichotomy between inside (work) / outside (freedom)??

89-92 "I think the great thing about Forest School is that they are taken outside where there is a lot of things that could be happening around them that requires them to concentrate that little bit more as well. So I think it helps in their learning in that respect as well as learning all about nature."

(D2, G2) P3 - Notion of being outside – exposure to different types of experiences – emphasis on concentration/learning. Approach allows them to focus?

95-99 "...But I think as a learning tool, to be able to come out as a group and behave responsibly in a different environment outside a classroom and concentrate on something else when there are lots of other things happening around you has got to be beneficial to any child."

P3 - Opportunity of learning in a different environment, in groups, exposure to lots of things happening in surrounding environment – Seen as positive for all children.

115-117 "...as has been said, anything to do with outdoors, get them out of the house, in my eyes it's fab, I can't fault it."

P4 - Appreciation of the benefits for children from being exposed to outdoor environments.

120-121 "anything that pushes them out, as parent 1 said into a different environment has got to be a good thing."

P4 - Children benefit from exposure to different environments?

296-298 "Anything to be on the move and still doing things whilst still learning and then putting them back in the classroom helps I think...that break."

P9 - Outdoor learning experiences can be used to support classroom based learning.

332-334 "Again, I think because it's outdoors, doing nature it's not like the equation of blah blah which they might think is boring. If you are outside and you say "How did you know that?" They will then go into depth about it."

(D2, G1) P10 - "Outdoors" - Learning in a different context may provide more stimulating experiences?

340-344 "I can honestly say, whenever my children are in a field that they are bored. They can find something, dig it, climb it, hold it, build it whatever. Whereas maybe this is a help because our children are still the generation of the computer and the tele, so there must be something good in this."

(D2, E1) P10 - Beneficial for children to have exposure to outdoor environments – parents battling against "computer generation" – value children being able to learn / do things outdoors.

D3. Computer age generation

46-49 "I think where you have got children that are just constantly on computers or what have you this is good for them to think 'Oh yeah, there is more than in your bedroom on your Xbox' you know, to get out and about."

P2 - Competing with technology - trying to keep children in, takes learning outside.

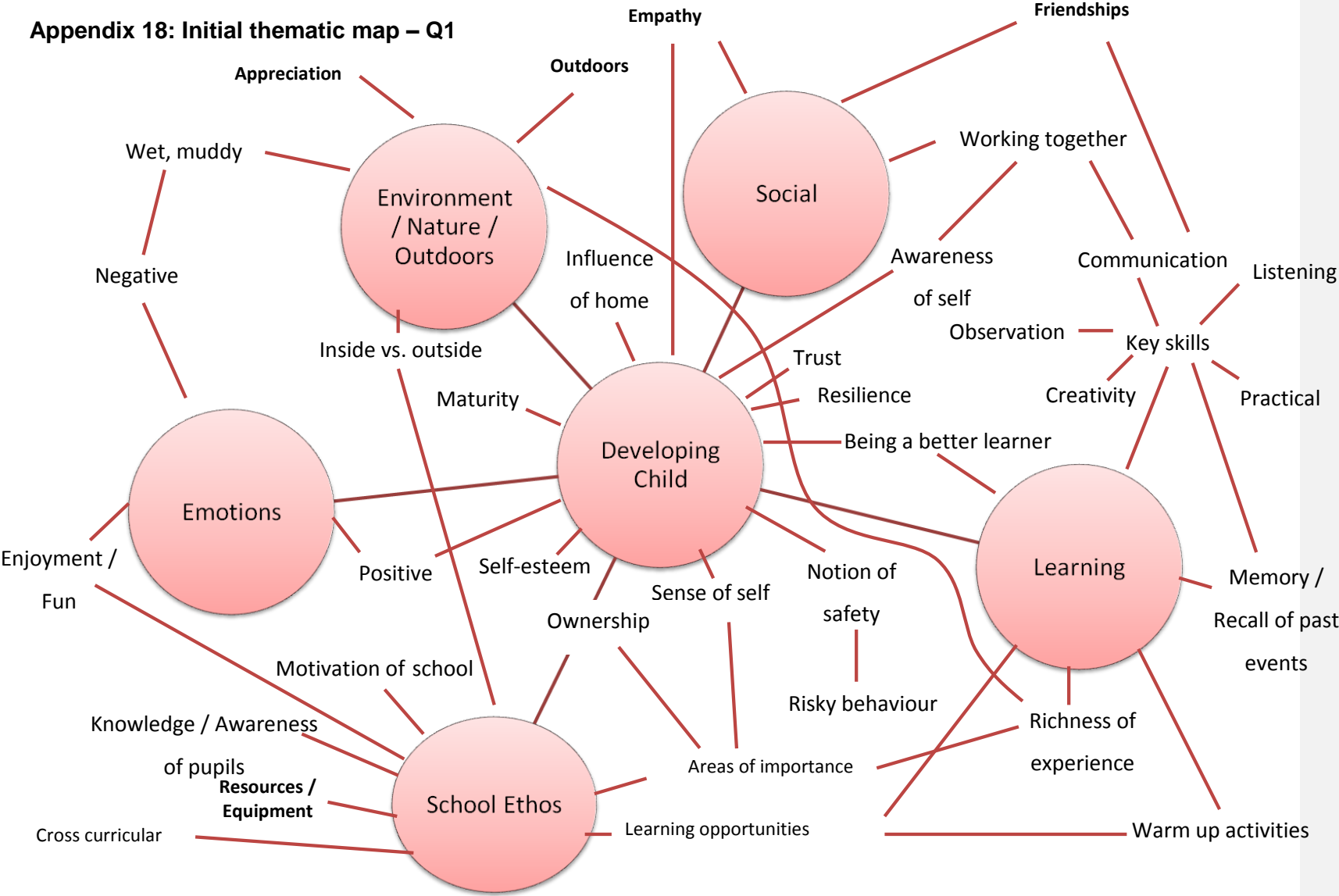
118-120 "I think the problem that we've got as parents compared to our day when we were kids is the amount of technology that is available to kids now is designed to keep them indoors."

P4 - Outdoors vs Technology.

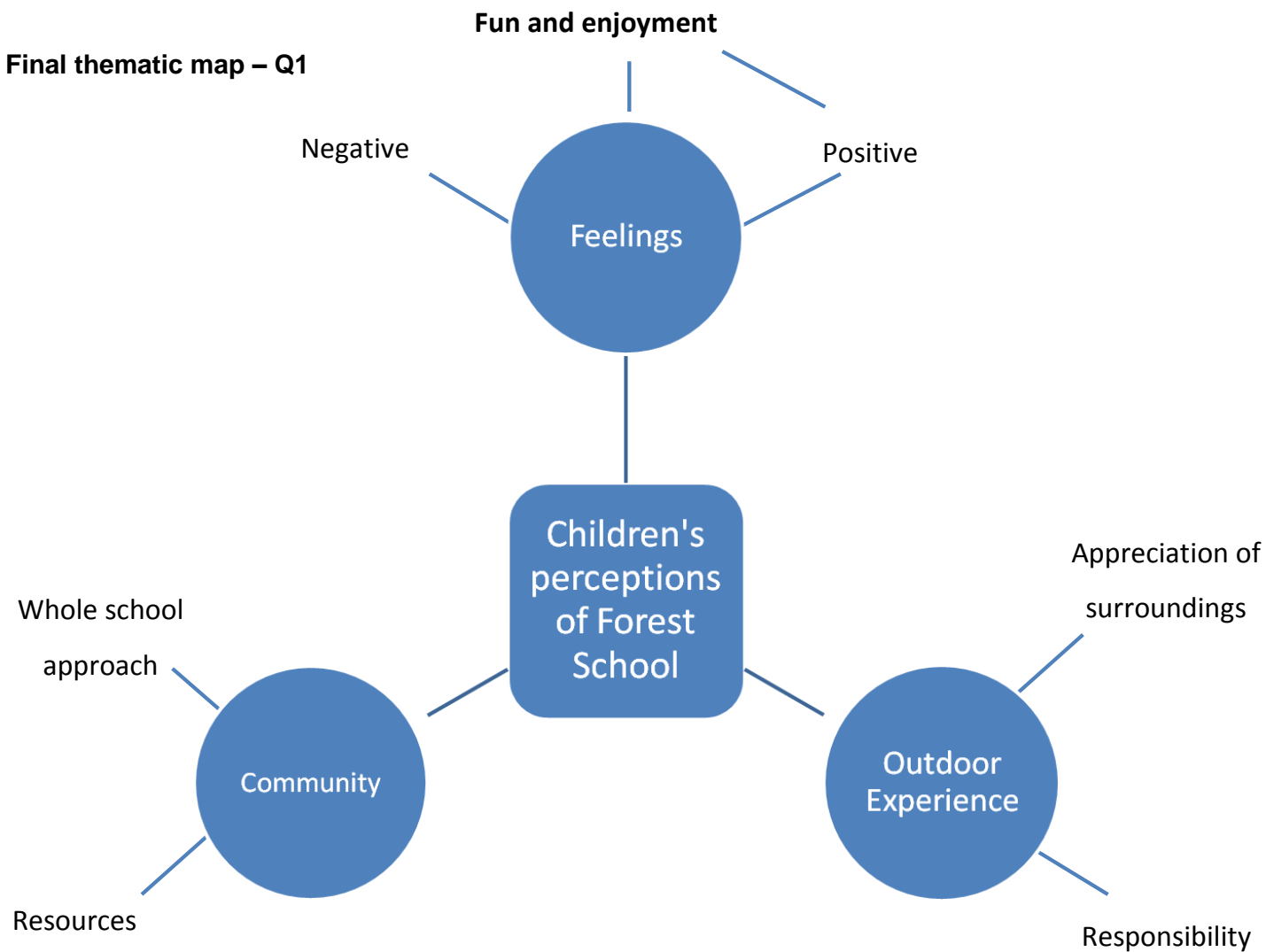
340-344 "I can honestly say, whenever my children are in a field that they are bored. They can find something, dig it, climb it, hold it, build it whatever. Whereas maybe this is a help because our children are still the generation of the computer and the tele, so there must be something good in this."

(D2, D3) P10 - Beneficial for children to have exposure to outdoor environments – parents battling against "computer generation" – value children being able to learn / do things outdoors.

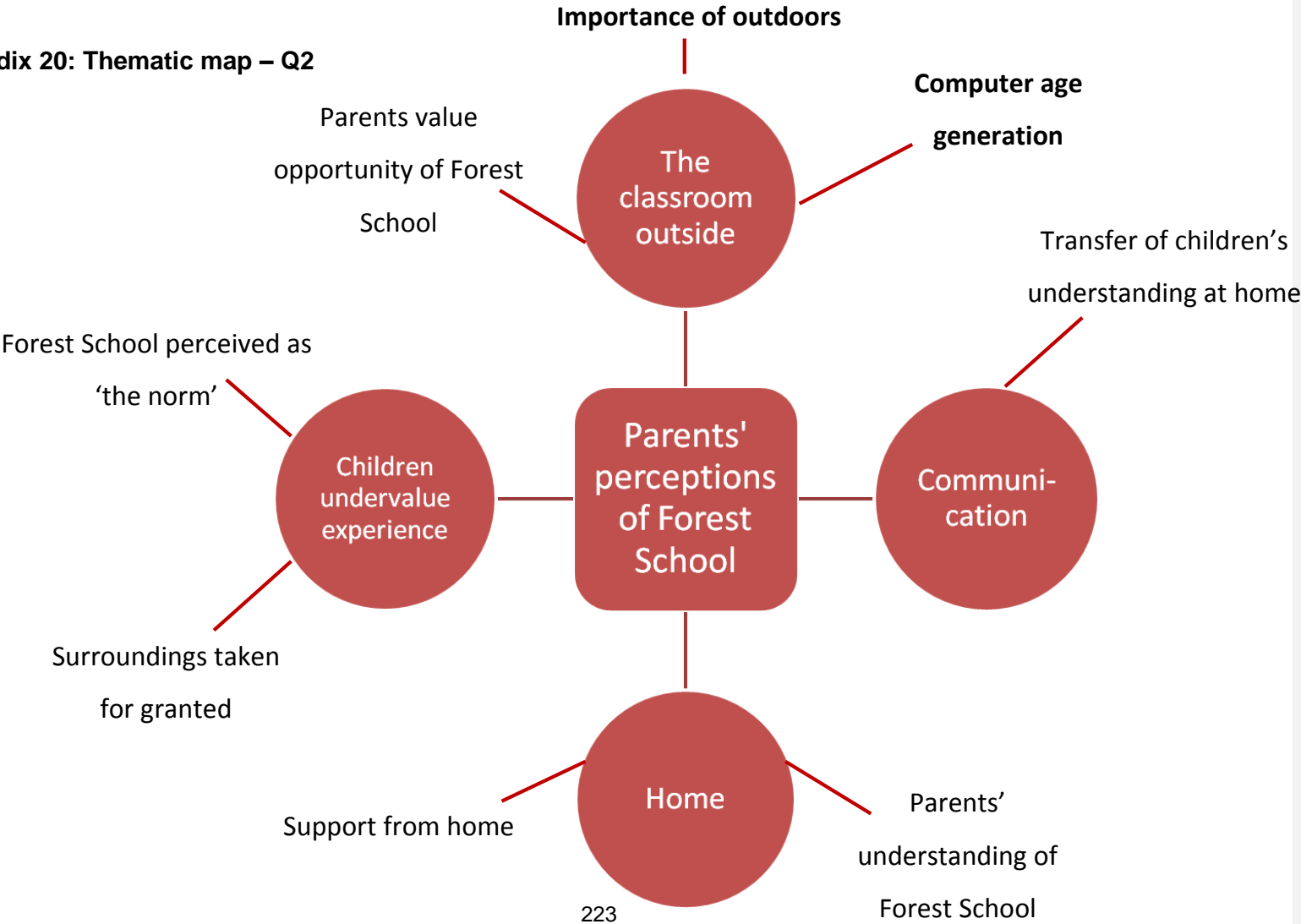
Appendix 18: Initial thematic map – Q1



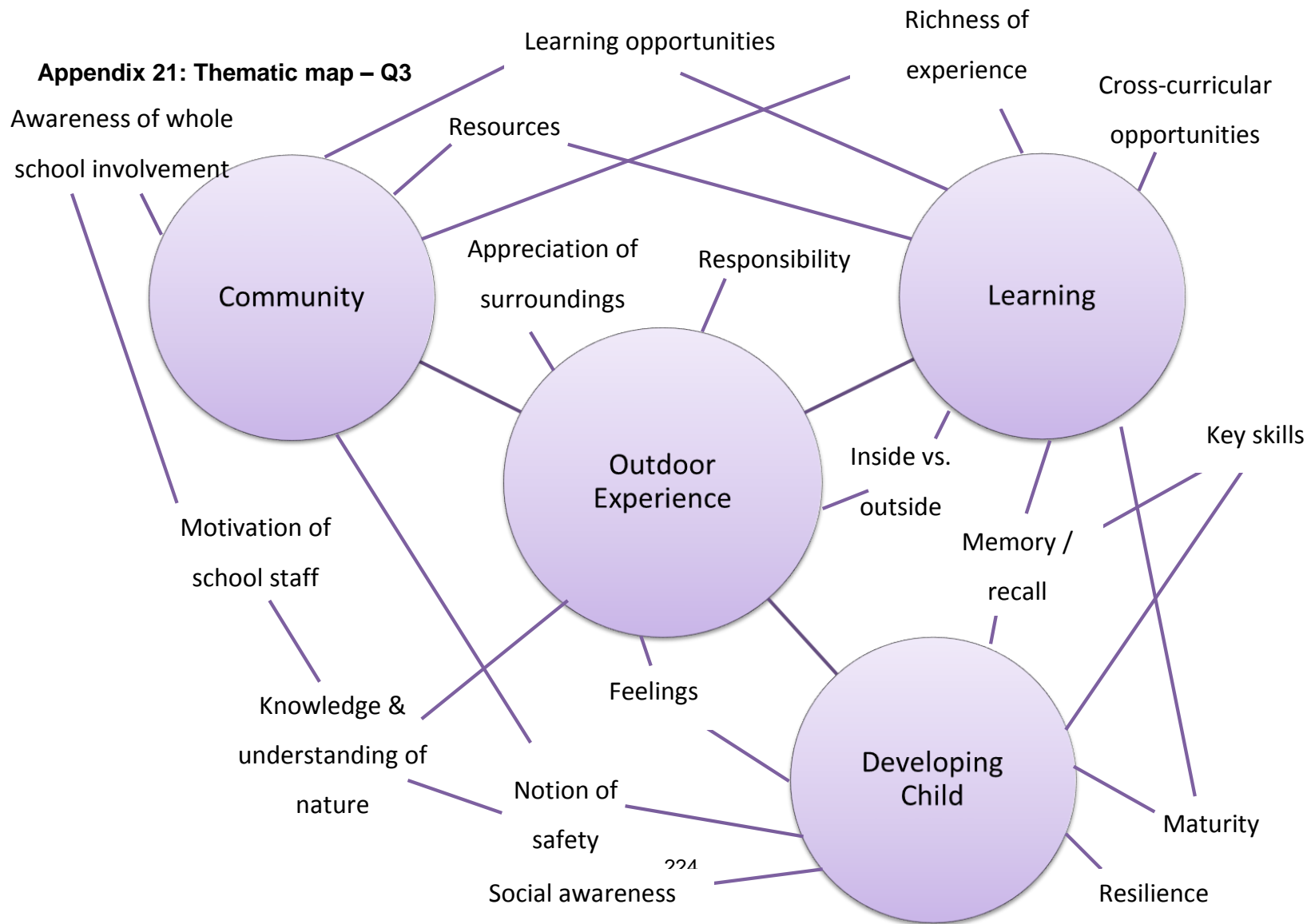
Appendix 19: Final thematic map – Q1



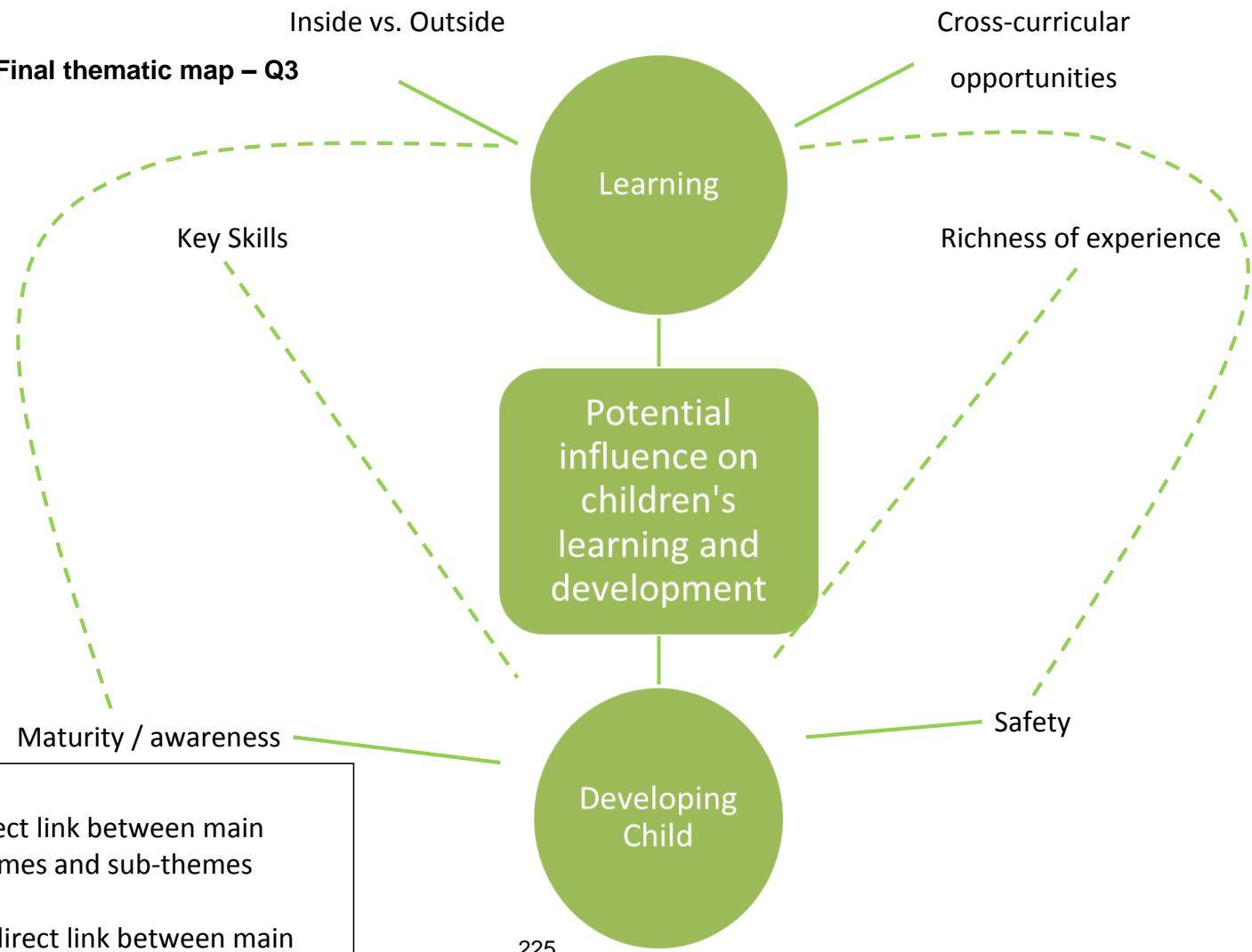
Appendix 20: Thematic map – Q2



Appendix 21: Thematic map – Q3



Appendix 22: Final thematic map – Q3



Key

— Direct link between main themes and sub-themes

- - - In-direct link between main themes and sub-themes

