

An Ethnographic Study of Forest School: Relational Caring Pedagogy in an Irish Primary School

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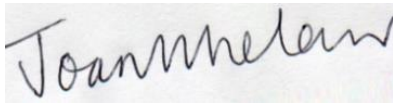
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July 2022

Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy is entirely my own work, and that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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Returning to the St Patrick's campus of DCU to complete my PhD was a coming home of sorts for me. Here I embarked on my teaching journey in September 1978, as a seventeen-year-old B.Ed. student. Now, some 43 years later, as I complete my PhD, I wish to extend my deepest gratitude to all those who have guided me over the past five years.

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Table of Contents

Declaration	ii
Acknowledgements	iii
Table of Contents	iv
List of Abbreviations	ix
List of Tables	x
List of Figures.....	xi
Abstract.....	xiii
 Chapter 1: Introduction	 1
1.1 Introduction	1
1.2 Rationale	3
1.3 FS Emerges in Ireland	8
1.4 Summary of the Research Design	10
1.5 Organisation of the Thesis	12
 Chapter 2: The Conceptual Framework	 14
2.1 Introduction	14
2.2 FS as Relational Pedagogy	14
2.3 A Relational Ethic of Care -Theoretical Perspectives	16
2.4 Relational Caring and Nature	18
2.5 Nature, Flourishing and Agency	21
2.6 An Indigenous Perspective	24
2.7 Curriculum, Pedagogy and Care	26
2.8 Nature-based Relational Pedagogy to Challenge	28
2.9 Conclusion.....	37
 Chapter 3: Literature Review	 39
3.1 Introduction	39
3.2 English FS	39
3.3 The Wider Historical Context	41
3.4 Contemporary Influences	42
3.5 Guiding Principles	44
3.6 Outcomes	44
3.7 Impact on Adults	47
3.8 Pathways to Success	49
3.9 Nature in FS	52
3.10 The Challenge of Exponential Growth	54
3.11 Performativity	55
3.12 Commodification	57
3.13 Conclusion	59
 Chapter 4: Methodology	 62
4.1 Introduction	62
4.2 The Research Design	62
4.2.1 Philosophical Worldview	63
4.2.2 Philosophical Pragmatism	64
4.2.3 Strategy of Enquiry – Ethnography	66
4.2.4 Research Methods.....	67

4.3 Ethics	70
4.3.1 Informed Consent and Assent.....	70
4.3.2 Vulnerability of Participants	70
4.3.3 Anonymity	71
4.3.4 Data Storage.....	71
4.4 Validation Strategies.....	72
4.4.1 Researcher Positionality	73
4.4.2 Rich Description	73
4.4.3 Triangulation	74
4.4.4 Participant Validation	74
4.4.5 Reflective Diary	75
4.5 Participants and Data Collection.....	75
4.5.1 Participants: Bay School	75
4.5.2 Participants: Children	76
4.5.3 Participants: Staff	76
4.6 Data Collection in Bay School	78
4.6.1 Participant Observation	78
4.6.2 Staff Planning Focus Groups	78
4.6.3 Staff Look-back Focus Groups	78
4.6.4 Staff Session Review Meetings	79
4.6.5 Staff Individual Session Review Sheet.....	80
4.6.6 FS Staff Review and Reflection (End of Sessions)	81
4.6.7 FS Children's Focus Groups	81
4.6.8 FS Children's Activity Pack	81
4.6.9 Parent Sheets	81
4.6.10 Documentary Sources	82
4.7 The National Survey	82
4.7.1 Participants	82
4.7.2 Data Collection Methods	82
4.8 The Pilot Phase	83
4.8.1 The Pilot Phase in Bay School	83
4.8.2 The National Survey – Design Phase	86
4.9 Data Analysis.....	89
4.10 Qualitative Data Analysis	89
4.10.1 Pre-coding	91
4.10.2 First Cycle Coding	91
4.10.3 First to Second Cycle Coding	92
4.10.4 Second Cycle Coding	92
4.11 Quantitative Data Analysis	93
4.11.1 Exploratory Factor Analysis (EFA)	93
4.12 The Write Up	97
4.13 Conclusion	98
Chapter 5: Findings -Temporal Routines and Pedagogical Practices	100
5.1 Introduction	100
5.2 Sites	100
5.3 Temporal Routines	102
5.3.1 North/North-east Routine One: Preparations	104
5.3.2 North-east Routine Two: Arrival	106
5.3.3 North-east/East Routine Three: The Opening Circle.....	109

5.3.4 South-east/South Routine Four: Main Activity and Skills	110
5.3.5 South-west Routine Five: Sharing Food	113
5.3.6 South-west/West Routine Six: Diary Time	114
5.3.7 West Routine Seven: Free Play	115
5.3.8 West/North-west Routine Eight: The Closing Circle	116
5.4 Pedagogical Practices	118
5.4.1 Practice One: Being with(in) Nature	118
5.4.2 Practice Two: Curriculum	120
5.4.3 Practice Three: The Teacher	122
5.4.5 Practice Four: Communication	125
5.4.6 Practice Five: Planning, Review and Reflection	127
5.5 Conclusion	128
Chapter 6: Findings - Voices from Bay School	130
6.1 Introduction	130
6.2 Staff Voices	130
6.3 Theme One: Being with(in) Nature	131
6.3.1 FS is Restorative	131
6.3.2 A Spiritual Connection with Nature for Children	132
6.3.3 Affordance of the Natural Environment	133
6.4 Theme Two: Intentions	135
6.4.1 How does FS Support these Intentions?	136
6.5 Theme Three: Curriculum and Pedagogy	137
6.5.1 Emergent Planning	137
6.5.2 Integration with Curriculum Delivery	139
6.5.3 Novel Routines: Time	140
6.5.4 Novel Routines: Boundaries and Calls	141
6.5.5 Assessment and Progression	142
6.6 Theme Four: Teacher Identity	143
6.6.1 Teacher as Observer	143
6.6.2 Teacher as Participant	144
6.6.3 Teacher as Collaborator	145
6.7 Theme Five: Resourcing FS	146
6.8 Children's Voices	147
6.8.1 FS is Learning with(in) Nature	147
6.8.2 FS is Sensory and Experiential	148
6.8.3 Learning in FS is Different	150
6.8.4 Lowpoints	151
6.9 Parents' Voices	152
6.9.1 Parents are Positive about FS	152
6.9.2 FS is a Favourite Activity	152
6.9.3 FS Supports Learning	152
6.9.4 Opportunities to Learn with(in) Nature are Important	153
6.10 Conclusion	153
Chapter 7: Findings - A National Survey	155
7.1 Introduction	155
7.2 Demographics	155
7.2.1 Gender	155
7.2.2 Age Group	155

7.2.3 Occupation	156
7.2.4 FS Qualification	158
7.3 Perspectives on Nature	158
7.4 Qualitative Findings	160
7.4.1 Describing FS	160
7.4.2 Becoming Involved in FS	165
7.4.3 Introducing FS	166
7.4.4 Distinctiveness of FS	167
7.4.5 Good Teaching	169
7.5 Exploratory Factor Analysis	170
7.5.1 Factor One: Nature Connection	171
7.5.2 Factor Two: Traditional Pedagogy	177
7.5.3 Factor Three: Risk and Learning Outdoors	182
7.5.4 Differences Between Grouping Variables	186
7.6 Conclusion	188
Chapter 8: Discussion - The Lifeworld of FS	190
8.1 Introduction.....	190
8.2 The Life World of FS	190
8.2.1 Relationality.....	192
8.2.2 Spatiality	196
8.2.3 Corporeality	198
8.2.4 Temporality	201
8.2.5 Materiality	202
8.3 Being Differently - Recognising Caring.....	203
8.4 FS as Caring Relational Pedagogy	206
8.5 Conclusion	208
Chapter 9: Conclusion.....	210
9.1 Introduction	210
9.2 Synopsis	210
9.3 Implications	213
9.4 Contribution to Knowledge	216
9.5 Recommendations	218
9.6 Future Research	221
9.7 Concluding Thoughts	222
Bibliography	225
Appendices.....	253
Appendix A: DCU Confirmation of Ethical Approval	255
Appendix B: Letter to Chairperson of Board of Management	256
Appendix C: Invitation to Principal, Staff and Parents	260
Appendix D: Invitation to IFSA and FS Training Organisations	268
Appendix E: Children's Assent Form	275
Appendix F: Participant Validation Summary	278
Appendix G: Staff Planning Focus Group Schedule	280

Appendix H: Staff Look-back Focus Group Schedule.....	281
Appendix I: Staff Review Meeting Schedule.....	282
Appendix J: Staff Individual Session Review Sheet	283
Appendix K: FS Staff Review and Reflection (End of Sessions)	284
Appendix L: Robins Children Pre-FS Focus Group Schedule	285
Appendix M: Children’s Look-back Focus Group Schedule	286
Appendix N: Owls Children Look-back Activity Pack	287
Appendix O: Parent’s FS Sheet (Pre and Post)	289
Appendix P: The Design of the National Survey	291
Appendix Q: The Pilot Survey	315
Appendix R: The National Survey	325
Appendix S: List of Initial Codes and Code Mapping	336
Appendix T: Initial Statistical Steps for EFA.....	341
Appendix U: FS Curriculum Plan, Robins	363
Appendix V: Curriculum Linkage and FS Plan, Owls	365
Appendix W: FS Child Assessment Sheet (Pre and Post)	368
Appendix X: Teacher FS Observation and Assessment Schedule	369
Appendix Y: FSL Risk Assessment and Review Schedule.....	370

List of Abbreviations

CNS	The Connectedness to Nature Scale
CPD	Continuing Professional Development
DCU	Dublin City University
DES	Department of Education and Skills
EFA	Exploratory Factor Analysis
EIS	The Environmental Identity Scale
EOE	Environmental and Outdoor Education
ET	Educate Together
FS	Forest School
FSA	Forest School Association
FSL	Forest School Leader
FSLs	Forest School Leaders
IFSA	Irish Forest School Association
KMO	Kaiser-Meyer-Olkin Test of Sampling Adequacy
LINE	Learning in Natural Environments
LOtC	Learning Outside the Classroom
NCCA	National Council for Curriculum and Assessment
NEP	The New Environmental Paradigm Scale
NGO(s)	Non-Governmental Organisation(s)
NR6	The Nature Relatedness Scale
OE	Outdoor Education
OL	Outdoor Learning
PE	Physical Education
QQI	Quality and Qualifications Ireland
SEN	Special Education Needs
SESE	Social, Environmental and Scientific Education
SNAs	Special Needs Assistants
SPHE	Social, Personal and Health Education
STEM	Science, Technology, Engineering and Mathematics
TA	Teaching Assistant

List of Tables

Table 1:	FS Sessions and Staff.....	77
Table 2:	Attendees at the Staff Session Review Meetings	80
Table 3:	Occupational Group of Respondents	156
Table 4:	FSL Qualification of Respondents	158
Table 5:	Respondent Description of FS	161
Table 6:	Becoming Involved in FS	165
Table 7:	What is Needed to Introduce FS	166
Table 8:	Distinctiveness of FS	168
Table 9:	Summary of EFA for Environment Items.....	172
Table 10:	Nature Connection Item Frequencies.....	175
Table 11:	Summary of EFA for Pedagogy Items.....	178
Table 12:	Traditional Pedagogy Item Frequencies	181
Table 13:	Summary of EFA for Risk and Learning Outdoors Items	183
Table 14:	Risk and Learning Outdoors Item Frequencies	185

List of Figures

Figure 1: The Conceptual Framework	16
Figure 2: The Natural Learning Cycle.....	30
Figure 3: Assessment – Indicators of Awareness.....	32
Figure 4: The Learning Through Nature Cycle	34
Figure 5: Learner-centred Pedagogy	35
Figure 6: The Research Design Framework	63
Figure 7: Beliefs Associated with Philosophical Pragmatism	65
Figure 8: The Social Research Process in Ethnography	66
Figure 9: The Research Design	69
Figure 10: The Route to Site One	84
Figure 11: The Pilot Phase in Bay School	85
Figure 12: The Design of the National Survey	87
Figure 13: The Framework for Data Analysis	90
Figure 14: The Route to FS	101
Figure 15: A Bird’s Eye View of FS and the Park	102
Figure 16: The Bay School FS Core Routines.....	103
Figure 17: On Our Way	106
Figure 18: Grandmother Tree with Boundary Flags	107
Figure 19: Base Camp	109
Figure 20: Meditation	110
Figure 21: Tools	111
Figure 22: Rafts	112
Figure 23: Lunch.....	114
Figure 24: Diaries	115
Figure 25: Camouflage	116
Figure 26: Gratitude.....	117
Figure 27: Childrens’ Highpoints of FS	148
Figure 28: Childrens’ Lowpoints of FS	151

Figure 29: Histogram Factor 1: Nature Connection	174
Figure 30: Histogram Factor 2: Traditional Pedagogy	180
Figure 31: Histogram Factor 3: Risk and Learning Outdoors	184
Figure 32: The Lifeworld of FS	191

Abstract

An Ethnographic Study of Forest School: Relational Caring Pedagogy in an Irish Primary School

Joan Whelan

The aim of this ethnography was to explore the potential of Forest School (FS) as relational caring pedagogy, through telling the story of how FS is experienced and understood in Bay School, the first Irish primary school to introduce FS in 2012. FS is a progressive nature-based pedagogy that traces its lineage back to Rousseau. Noddings' scholarship on a relational ethic of care was integrated with a place-responsive, more-than-human epistemological perspective to conceptually frame the study. The study contributes an innovative perspective on flourishing, wellbeing and caring relationships in the primary school and new knowledge regarding how FS is understood and experienced in Ireland.

Data collection took place during the 2019-2020 school year. Methods included field notes collected by me, as participant-observer, during 22 four-hour FS sessions; focus groups with staff and children and documentary data. A national survey of Irish adults interested in FS contextualised the ethnography. The national survey included 63 five-point Likert items, five qualitative items and biographical information. An inductive approach guided the overall analysis, comprising thematic analysis of the qualitative dataset and exploratory factor analysis of the Likert items.

Relational caring pedagogy in FS is enabled through extending 'school' to include local nature and by fidelity to the principles of FS, towards flourishing for all sentient beings. Pedagogy in FS is more naturalistic, embodied, collaborative and democratic than in the indoor classroom. FS is notable for its novel routines regarding 'classroom' management, transitions and assessment. FS provided a distinctive space for children's social and emotional development, for teachers to explore their professional identities and for nature connection. The FS leader played a key role in supporting this pedagogy. These findings describe potentially transformative pedagogical experiences which challenge the notion of school and help us to (re)define the purpose of education as we grapple with the Anthropocene.

Chapter 1: Introduction

'We leave their fingerprints on everything we touch' (Boran, 1993, p. 20).

1.1 Introduction

I first heard about Forest School (FS) on an autumn day in 2012. As my sister and I walked in Stoke Poges churchyard, in Buckinghamshire, England, the resting place of poet Thomas Grey, she talked about her experience of training as a Forest School Leader (FSL). This was part of an initiative in the infant school where she worked as a teaching assistant (TA). She described how two staff members, herself and a teacher, both trained Forest School Leaders (FSLs), walked to a local woodland once a week. They took half the class group out for a two-hour session, whatever the weather, to play, to make nature-based art and to learn about the woods. It sounded intriguing and I asked her to send on some of the material provided in the training.

At that time, I was concerned about relationships in one class in Bay School, where I was the principal¹. There were a significant number of children with additional learning needs in the class and as a result, higher than usual levels of staffing. The class teacher and a special education needs (SEN) teacher and two special needs assistants (SNAs) were assigned to work full time with the class group of 30 children. There were different programmes in place for individual children, but less attention was given to the needs of the group as a whole. The school year was barely two months old, yet the cohesiveness of the class group as a learning community was fraught. I was trying to think of a different approach that would help us all to move forward together, while recognising our individual perspectives.

As my sister and I chatted that day, this class came immediately to mind. I found out more about FS in the weeks following and in December 2012, I presented a proposal to the Board of Management of Bay School, which sought to introduce FS in the spring of 2013. The proposal was accepted, subject to me finding funding and documenting the process. This information would be used to determine whether or not FS would remain part of the school's pedagogical repertoire going forward. I set about sharing my knowledge of FS with the staff and the parents and children who were to participate that year. There was concern expressed by a small group of parents, who felt that this idea was new and untested and not the best way to use the teaching resources available to the class. The Board of Management came under pressure to reconsider its

¹ A pseudonym. Bay School is the site of the ethnography described in this study.

decision. All the while, I read and learnt more about FS and began to make connections with the Forest School Association (FSA) in England. I became increasingly convinced that FS was an appropriate response to help us all to get to know each other better and in so doing provide a more effective learning environment. Two private funders came on board, so that no school funds were being used at that point. The manager of the school age childcare service in Bay School enthusiastically agreed to avail of upcoming FS leadership training in Belfast in Northern Ireland and to lead the delivery of FS in the school.

The first Irish FS project was underway. The rest, as they say, is history. The pilot project was very successful. Adults and children did get to know more about each other, and about themselves; conversations took place about being in local nature and how the school community had been unaware of what lay on their doorstep². There was a sense of pride and joy in the whole initiative. Parent and teacher surveys indicated high levels of satisfaction, which were echoed by the children. A model was put in place for the delivery of FS in Bay School that broadly remains in place today (2022). I became immersed in the fledgling Irish FS movement, and in 2016 I was a founding member of the Irish Forest School Association (IFSA). I remain the chairperson today (2022).

That experience was the catalyst for this study. Having retired in 2016, I embarked on this PhD journey in 2017 because I wanted to deepen my understanding of the progressive outdoor education (OE) that is FS through an academic study³. My experience of introducing FS in Bay School helped me to see the potential of nature-based pedagogy in our schools. FS had unlocked a door to a more responsive, relational pedagogy than the indoor classroom had ever enabled. This led to a framing of the current study around FS as a caring, place-responsive pedagogy. This study of FS is about the kind of pedagogies that we want to foster in contemporary schooling. It is

² The terms nature and the natural world are used interchangeably in this thesis in their generally understood meaning of all the animals, plants, landscapes and features of the earth not made or caused by people.

³ Outdoor Education (OE) is used as a general term in this study in its broadly accepted definition of learning that is experiential, that takes place mostly outdoors and that at its core is about relationships between people and places (Smith, 2021). OE encompasses both adventure education and environmental education. It is used interchangeably in the literature with Outdoor Learning (OL), Learning Outside the Classroom (LOtC), Learning in Natural Environments (LINE) and Natural Schooling.

about a recognition that we live in an interconnected world where individuals cannot flourish if their communities are in a state of disequilibrium which does not promote interdependence at all levels. The term flourishing is used in this study in its generally understood meaning of living well and thriving as a result of a favourable environment. That is, the Aristotelian idea of the good life, a life well lived. This study is premised on the idea that flourishing must comprise mutually reciprocal benefit for *all* sentient beings. This is a more radical view of flourishing that extends beyond the human world to include the natural world.

This is a timely study. When schools reopened in 2021, following the Covid-19 closures, the Department of Education and Skills (DES) in Ireland, somewhat belatedly, highlighted the use of progressive OE as a key pedagogical strategy towards promoting wellbeing (DES, 2021). Learning in local nature is also, albeit briefly, explicitly mentioned in the draft consultation on curriculum re-development currently underway at primary (elementary) level in Ireland (NCCA, 2020). I believe that FS can potentially offer transformative change in our primary schools, by making relational, caring pedagogy more accessible in our schools. The following section sets out the rationale for the study in greater detail.

1.2 Rationale

The promotion of wellbeing is a key priority of Irish education policy. The DES policy on wellbeing draws on an inter-departmental Irish public policy framework that includes the Healthy Ireland Strategy 2013-2035 (Department of Health, 2013); The Better Outcomes, Brighter Futures Report (Department of Children & Youth Affairs, 2014); the National Strategy on Education for Sustainable Development 2014 -2020 (DES, 2014); the STEM Education Policy Statement 2017 - 2026 (DES, 2017a) and the Creative Ireland Programme 2017 - 2022 (Government of Ireland, 2017). The DES definition of wellbeing, a contested term, is a broad one:

Wellbeing is present when a person realises their potential, is resilient in dealing with the normal stresses of their life, takes care of their physical wellbeing and has a sense of purpose, connection and belonging to a wider community. It is a fluid way of being and needs nurturing throughout life (DES, 2019, p.10).

The DES wellbeing policy explicitly links wellbeing with progressive pedagogy, citing democratic, inclusive, engaging and differentiated classrooms as central (DES, 2019). There is an explicit focus on social and emotional competencies as being crucial to

wellbeing in our school communities. Wellbeing is realised in community and there is explicit acknowledgement that to be human is to be relational (DES, 2019, p. 10).

Indeed, since 1971, the national primary curriculum framework in Ireland has been based on a child-centred, discovery-based, integrated curriculum. The current Primary Curriculum (Department of Education & Science, 1999) evolved from the Piagetian constructivism of the 1971 'New Curriculum' (Department of Education, 1971) towards the social constructivism of Vygotsky as its underpinning philosophy. The 1999 curriculum introduced Social, Environmental and Scientific Education (SESE) for all classes. Inquiry-based learning was prioritised, and the work of Bruner evident in the call to ensure children worked as scientists, historians and geographers. Environmental awareness and care was introduced as a cross-curricular strand and an emphasis was placed on the exploration of the local area in all teaching and learning. A new Social, Personal and Health Education (SPHE) curriculum was introduced to encourage the development of respect for the natural environment and a sense of responsibility and stewardship for its long-term care. The 1999 Physical Education (PE) curriculum introduced Outdoor and Adventure Education as one of six strands in the PE curriculum. The introduction of the AISTEAR Framework for early years (NCCA, 2009a) supported the philosophy of the child as a capable and active learner and prioritised play and relationships as the two primary contexts for learning in the early years⁴. It set out a more transformative view of pedagogy, perhaps enabled by the less well established 'norms' of early years practice in Ireland, when compared to the primary school context.

However, there is an absence of attention to the potential of progressive, **nature-based** pedagogy, such as FS, to contribute to wellbeing and flourishing in this expansive policy and curricular framework. Given the existential threat to wellbeing and flourishing posed by the climate emergency and the structural inequalities in our world, it is inconceivable that universal flourishing can be achieved without a more complete consideration of nature as a source of pedagogical inspiration, both in our policy framework and in the lived experiences of school communities. This thesis is predicated on promoting wellbeing and flourishing in our schools as a relational undertaking that must acknowledge the interconnectedness of all life.

⁴ AISTEAR sets out four interconnected themes for children's learning. These are wellbeing; identity and belonging; communicating; exploring and thinking.

In order to promote wellbeing and flourishing for all through relational pedagogy we require pedagogical strategies which enable us to experience the presence and the power of nature. As Bonnett puts it, understanding this world and its moral demands ‘*requires ways of knowing it that allow it to show itself in all its facets*’ (Bonnett, 2012b, p. 297). The foundational change is reimagining the place that is ‘school’ (the indoor classroom) to include local nature (the ‘forest’), within a more-than-human epistemology (Abram, 2017). Thus, nature joins us as co-teacher on our learning journey (Blenkinsop & Fettes, 2020; Cree & Robb, 2021; Quay & Jenson, 2018). This changed focus is required to reconcile contradictions between the converging evidence of benefit associated with progressive OE and the constraints under which school communities are delivering curriculum, which are not conducive to such pedagogy. This study is about a transformative vision of schools that ‘*takes the idea of care as its organising principle*’ (The Care Collective, 2020, p.19).

This study puts forward the idea of relational caring as foundational to wellbeing and flourishing in our schools and in society more generally. Care is understood as ‘*our individual and common ability to provide the political, social, material, and emotional conditions that allow the vast majority of people and living creatures on this planet to thrive – along with the planet itself*’ (The Care Collective, 2020, p. 6). This is a radical approach to wellbeing and flourishing that seeks to address the structural inequalities in our world, including climate change. Seeking alternatives to the dominant utilitarian models of western education is a call for a dialogical transformation of the learning landscape (Blenkinsop & Fettes, 2021; O’Brien, 2021; The Care Collective, 2020; UNESCO, 2015; Wals, 2017). This is about loosening the ties to the ‘classroom’ and extending ‘schooling’ into the community and across the lifespan, as proposed by Dewey (1915; 1975) and Freire (2017). Relational caring is a particular way of exercising care that is predicated on expressed needs (Noddings, 2005a). However, relational caring is limited by the priority extended to instrumental outcomes in our schools. O’Brien & O’Shea (2017) highlight this propensity: ‘*It is often the inability or failure to step into the challenge of wellbeing that generates the need for wellbeing pedagogies in the first place*’ (p. 5).

My study proposes that FS offers possibilities towards stepping into the challenge of creating more relational, caring pedagogy in our schools, the ‘*focussed attention*’ (DES, 2019, p. 20) on wellbeing required by the Irish policy framework. This ethnographic study of FS will provide more information on how FS can support

this kind of relational pedagogy in Irish primary schools by sharing the story of how FS is understood and practiced in Bay School. The degree to which FS pedagogy can sit within western neo-liberal education systems is the subject of robust discussion within and beyond the FS literature. At the same time, the worldwide growth of nature-based pedagogy is witness to possibilities for transformative change in education systems. Extending pedagogical practice, through relational caring pedagogy, has the potential to move the experiences children and adults have in schools closer to their lived experience (Gruenewald, 2003a, b), on the one hand; and to enhance that lived experience through experiences of relational caring (Noddings, 2002, 2005a, 2013a) with(in) nature. The term ‘being with(in) nature’ is used as a general term in this thesis to describe the different positions of the human world on the sentience of the natural environment, and to underscore that these positions change with experience. Being *in* nature suggests nature as a backdrop; being *with* nature suggests a move towards a sense of ‘dwelling’, of relationship, which being *within* nature expresses more completely.

Implementing progressive pedagogy has proved difficult in Ireland. A review of the implementation of the 1999 primary curriculum in Ireland found that teachers reported that classrooms did not support progressive pedagogy (NCCA, 2005; 2008) and a decade after its introduction, whole class teaching still dominated the primary classroom (Darmody, Smyth & Doherty, 2010). Curriculum reform has been impeded by a lack of attention to the role of practice and practitioners in reform (Coolahan, Drudy, Hogan, Hyland & McGuinness, 2017). The framing of the redeveloped language curriculum in 2009 (NCCA, 2009b) in terms of learning outcomes was an attempt to support more progressive pedagogy, by offering more flexibility and freedom to teachers to adapt and develop the curriculum framework. However, there are limitations on the extent to which teachers can act as curriculum developers as understood by the policy makers, given the many other demands on them (Coolahan et al., 2017). While large classes, limited non-pupil contact time and lack of practical resourcing undoubtedly contribute to limiting progressive pedagogical practice, perhaps more fundamental is what Kernan and Devine (2010) describe as a discourse of autonomy and freedom, versus power and control, where adults know best. This discourse has led to the ‘*increasing institutionalizing of children’s spaces*’ (Kernan & Devine, 2010, p. 382) in childhood. Thus, promoting playful learning, for example,

‘*renders teaching invisible*’ (Fallon, 2015, p. 203) and gives rise to tensions for teachers and school leaders associated with accountability and the possibility of censure.

Moving learning beyond the indoor classroom is also proving to be resistant to change. Despite plentiful and convergent evidence regarding the importance of spending time with(in) nature for human flourishing (see chapter two) Irish children spend less time in nature (Fanning, 2010) than their parent’s generation and experience greater surveillance and supervision of their play in a smaller and more controlled geographical space that ever before (O Keeffe & O Beirne, 2014). Kernan (2007) in the early years context and Darmody et al., (2010) in the primary school context both highlighted ‘*the central importance of outdoor space in children’s accounts of their school life in Ireland, on the one hand, and on the other hand, the fact that the outdoor space was rarely used for teaching and learning*’ (Kernan, 2015, p. 9). Kernan’s view that more is required to promote OE in Irish primary schools aligns with a highly critical report published by The Heritage Council in 2016⁵. The natural environment was described as ‘*notably absent*’ from the statutory framework governing primary education in Ireland⁶ (Kilkelly, Lynch, Moore, O’Connell & Field, 2016, p.14). This report concluded that ‘*here is a deeper value system at play that says the outdoors is not viewed as important for learning*’ (Kilkelly et al., 2016, p. 31). This may well be the case. The National Strategy on Education for Sustainable Development (2014-2020) (DES, 2014), for example, did not mention OE, beyond restating existing curriculum objectives that mentioned the local environment, and setting out a list of continuing professional development (CPD) provided through the education centres network. Recent Irish doctoral studies (Madden, 2019; O’ Malley, 2014; Pierce, 2020) have endorsed this position. This is a missed opportunity to promote progressive OE in Irish primary schools.

This study suggests that making FS more widely available in Irish primary schools can support school communities to extend pedagogical practice beyond the indoor classroom and to gain a better understanding of progressive pedagogy. FS helps

⁵ The Heritage Council is an Irish public body whose mission is to develop a wide understanding of the vital contribution that our heritage makes to wellbeing. See <https://www.heritagecouncil.ie/>.

⁶The Education Act, 1998, The Education and Welfare Act, 2000 and the Education of Persons with Special Educational Needs Act, 2004

to change attitudes to learning with(in) nature and helps us to experience the sentience of all life, towards a more complete expression of flourishing and wellbeing.

1.3 FS Emerges in Ireland

The first FS practice in Ireland began in Bay School in Dublin in 2012, as described in the opening paragraphs. Around the same time, independent practitioners with a background in bushcraft and environmental education also began to explore FS approaches in Ireland. Ciara Hinksman, an Irish woman who had set up an environmental education business called Earthforce Education, now Forest School Ireland (<https://forestschoollireland.ie/>) met the owners of two English companies providing FS training, Marina Robb of Circle of Life Rediscovery (<https://circleofliferediscovery.com/>) and Carol Middleton and Elizabeth Swift (<https://www.huathe.org/>) in 2009 at an Art of Mentoring United Kingdom (UK) (<http://artofmentoring.life/>) event. Through that connection, they collaborated to bring FS training to Ireland for the first time in 2013. Training is accredited by the Open College Network in the UK and equates to Level 5 on the Irish Quality and Qualifications Ireland (QQI) framework. Trainees are required to be over 21 years and to have a prior environmental education, teaching or early years qualification. Training comprises two weeks directed in-person study and approximately 110 hours of self-study to be completed within twelve months. Training includes the planning, delivering and evaluating of a six-week FS programme with a minimum of eight children and the completion of a FS policies and procedures handbook. Other modules include specialist practical skills, woodland management and learning and development theories. All FSLs must in addition complete a Remote Emergency Care Level 2 Outdoor First Aid Training.

There are now (spring 2022) approximately 275 trained FSLs in Ireland⁷. Approximately half are estimated to be in practice. About half of those in practice are supporting FS within their own school, early years setting or workplace; the other half are independent FS providers. In late 2020, a group seeking approval for an Irish accredited QQI Level 6 FS Leadership qualification was established by Brigit's Garden,

⁷ Source: personal communication with the directors of the two training organisations that provide certified training in Ireland, and with IFSA. To place this in context, in 2019/2020, the period of the study, there were 3,240 primary schools in Ireland serving 567,716 children and almost 40,000 teachers.
Source: <https://www.gov.ie/en/collection/key-statistics/>

an environmental non-governmental organisation (NGO) in Galway in the West of Ireland (www.brigitsgarden.ie). It is anticipated that Irish accredited training will become available from late 2022⁸.

The IFSA was founded in 2016 to promote quality, inclusive FS practice in Ireland. It was agreed, after some debate, that the name ‘Forest School’ should be used to describe this kind of progressive nature-based pedagogy. The IFSA describe FS as:

An opportunity for the same group of learners and leaders to spend a sustained period outdoors, once a week, in a wooded environment, ideally year-round. A regular routine is followed that is learner-led and facilitated by trained leaders. Learning is closely related to developmental stage and regular curricular requirements. There must be a high ratio of leaders to learners, everyone must be suitably dressed and a risk/benefit approach to health and safety is followed by all (IFSA, n.d.).

An open meeting in October 2016 set out six guiding principles for FS pedagogy in Ireland⁹. These are:

- 1: FS is a long-term process of regular sessions, rather than a one-off, or infrequent, visits; the cycle of planning, observation, adaptation and review links each session.
- 2: FS takes place in a woodland or natural environment to support the development of a relationship between the learner and the natural world.
- 3: FS uses a range of learner-centred processes to create a community for being, development and learning.
- 4: FS aims to promote the holistic development of all those involved, fostering resilient, confident, independent and creative learners.
- 5: FS offers learners the opportunity to take supported risks appropriate to the environment and to themselves.
- 6: FS is run by qualified FS practitioners who continuously develop and maintain their professional practice.

The IFSA was formally launched in May 2017 and subsequently developed a mission statement:

To bring FS practitioners together to inspire inclusive, playful learning for all, in nature. We want to build resilience and relationships, through our

⁸ Source: personal communication with the chief operations director at Brigit’s Garden

⁹ These six principles broadly align with the UK guiding principles for practice. See <https://forestschoollassociation.org/>

connection with each other, and the natural world, while inspiring creativity and supporting wellbeing (IFSA, n.d.).

There is no public funding for FS in Ireland, as yet, and no regulation of provision. As elsewhere, FS has emerged in Ireland as a response to perceived gaps of one sort or another in formal and informal education settings. There is significant interest from the early years and the primary school sectors. To date, most primary school provision has arisen out of the personal interest of a member of the school community, usually a staff member or a parent. Primary schools in Ireland which have begun to offer FS are mostly, but not exclusively, within the Educate Together (ET) sector, and the tiny cohort of ‘alternative’ primary school settings, for example the Steiner schools, democratic schools and the home-schooling movement¹⁰.

1.4 Summary of the Research Design

This ethnographic study set out to describe how FS is experienced and understood in Bay School, the first Irish primary school to introduce FS, in order to explore the potential of FS as caring, relational pedagogy. Ethical approval was granted for the study from Dublin City University (DCU). See Appendix A. Three bodies of literature are integrated to conceptually frame the study. These comprise Noddings (2002; 2005a; 2013a) ethic of care and her ideas on schools as centres of care; secondly, Wattchow & Brown (2011) and Mannion, Fenwick & Lynch (2013) on place-responsive pedagogy and thirdly, an eco-philosophical perspective on the embeddedness of humans in a more-than-human world (Abram, 2017). Three research questions guided the study:

1. How is FS pedagogy experienced, and understood, in Bay School, the first Irish primary school to adopt this pedagogical approach?
2. How is that experience and understanding contextualised within the understanding of the wider Irish FS community?
3. What is the pedagogical distinctiveness of FS, according to these participants?

Ethnography is a strategy of inquiry in which the researcher, as participant observer, studies a group over a prolonged period of time in order to describe their culture (Hammersley & Atkinson, 2019). In this study, the ‘culture’ was the 22 FS sessions that

¹⁰ The Dalkey School Project was established in 1974. This was the forerunner of the Educate Together (ET) movement in Ireland, which established equality-based education in Ireland (Hyland, 2020). Bay School was established in 1988 as part of this movement.

took place in Bay School during the period of the study. Bay School was the first primary school in Ireland to introduce FS pedagogy in 2012, as already outlined. This is a co-educational, urban, publicly-funded primary school in Dublin city with (in 2019) 240 pupils, aged 4-12 years, 14 teaching staff and 3 SNAs, under the patronage of ET¹¹. By the end of their fifth year in the school, each child has attended approximately 24 weekly FS sessions from 8.30 am to 12.20 pm in either a private woodland area close by the school or in a local public park.

Data collection took place during the 2019-2020 school year. I participated in 22 FS sessions as participant-observer. Each FS session comprised 15 children and a minimum of two adults, including a teacher and the FSL. Data collected in Bay School included field notes and images completed by me as participant observer during these 22 four-hour FS sessions; data from four focus groups with staff and two with children, conducted before and after the series of FS sessions; transcripts from review meetings with staff following each individual FS session; documentary sources including parent surveys, children's writing and staff observation and planning sheets.

The inclusion of a national survey enabled me to contextualize the ethnography within the wider Irish FS landscape. A minimum of 200 responses to the national survey were sought and 232 responses were received, including 32 from staff who worked in Bay School during the period 2012 -2020. The national survey included 29 five-point Likert items about environmental issues; 34 items about teaching; two closed questions about engagement in civic actions to do with the environment; biographical information and five qualitative questions about respondent's experience and understanding of FS. This mixed approach to the enquiry enabled both depth and breadth to infuse the study, appropriate to its exploratory stance.

An inductive approach to data analysis was used. This comprised thematic analysis of the qualitative data and Exploratory Factor Analysis (EFA) using Principal Axis Factoring of the 63 Likert items in order to explore the constructs underpinning participants' attitudes. Descriptive statistics were used to generate demographic data and summary responses to individual Likert items. This approach to the analysis is well suited to both the ethnographic strategy of inquiry and the integration of both the

¹¹ The patron is the body that establishes and operates Irish primary schools. As set out in the Education Act of 1998, the patron appoints the Board of Management of the school and is responsible for the establishment and maintenance of the school's characteristic spirit and ethos.

qualitative and quantitative datasets. Multiple validation procedures including the provision of rich, descriptive data, ongoing statements of researcher positionality, the appropriate use of statistical tests in the quantitative dataset and an explicit account of the procedures used to integrate the different data sources were used to ensure the trustworthiness of the study

The results of the study are reported through a narrative description of the FS sessions in Bay School, based on my participant observations; an account of the views of the staff, the children and their parents and a presentation of the findings from the national survey. These findings are then integrated to set out the ‘lifeworld’ of FS for these participants. Relational caring is enabled in FS practice by extending ‘school’ to include local nature and fidelity to the pedagogical principles of FS. This is a potentially transformative perspective on the promotion of wellbeing and flourishing in Irish primary schools that has not been fully considered to date.

1.5 Organisation of the Thesis

This first chapter introduces the study. The chapter begins with a description of how I became involved in FS and how that involvement acted as a catalyst for this study. This is followed by a rationale for the present study, set within the current Irish public policy framework. The emergent FS movement in Ireland is described. A summary of the study is then provided. The introduction concludes with a description of the organisation of the thesis.

Chapter two sets out the conceptual framework of this thesis. The study draws upon care ethics, place-responsive pedagogy and a more-than-human epistemology to conceptually frame the study. The theoretical understanding behind a relational ethic of care and how it is conceptualised in this study are discussed. This includes a discussion of place-responsiveness, and the idea of nature as agentic. The kinds of changes in practice and pedagogy required to enact this relational caring in our schools are then discussed, including an account of how indigenous perspectives on pedagogy are informing this conceptual framework.

Chapter three synthesises the relevant empirical literature on FS. The chapter begins with a short account of the emergence of the modern ‘English’ FS movement, contextualised within the wider historical, and contemporary, educational and public policy context. The outcomes for children and for adults who participated in these studies are outlined. The explanations offered for these outcomes are then discussed. The implications of the growth of the FS movement worldwide is considered under the

themes of performativity and commodification. The chapter concludes by setting out the key themes that have emerged from this review.

Chapter four describes the methodology used in the study. The chapter opens with a description of my philosophical stance as a researcher (philosophical pragmatism), a description of the strategy of inquiry (ethnography) and of the research methods (field notes, focus groups, documentary sources and a national survey). This is followed by a detailed description of the ethical procedures and validation strategies that underpin the study. The pilot phase of the study and the design of the national survey are outlined. The procedures for data collection, data analysis and the write up of the study are then set out.

The findings of the study are reported over four chapters. Chapter five comprises a narrative description of FS in Bay School and responds to research question one. The chapter comprises a composite narrative of the temporal routines observed by me during 22 sessions of FS and an account of the pedagogical practices that pertained in FS in Bay School.

Chapter six gives voice to the staff, the children, and their parents, and presents their understanding, and experience, of participating in FS. This chapter also responds to research question one.

Chapter seven presents the findings from the national survey. The survey provides a broader context and a national picture against which the ethnographic study of FS in Bay School is presented. The national survey responded to research question two.

Chapter eight integrates the findings by setting out the lifeworld of FS for these participants. This lifeworld is critically examined in light of the conceptual framework in order to set out the distinctive contribution of FS as a relational, caring pedagogy, in response to research question three.

Chapter nine, the concluding chapter, summarises the findings of the research. It sets out implications arising from the findings as FS emerges in Ireland. Recommendations for future research are outlined. The story of FS in Bay School concludes with a brief personal reflection.

Chapter 2: The Conceptual Framework

Forest School as Caring Relational Pedagogy

'In nature, nothing exists alone' (Carson, 2000, p.60).

2.1 Introduction

This study makes an original contribution by proposing FS as a way to foreground caring relational pedagogy and praxis in our education systems¹². The study draws together Noddings (2002; 2005a; 2013a) ethic of care and her ideas on schools as centres of care, the scholarship of Wattchow & Brown (2011) and Mannion et al. (2013) on place-responsive pedagogy, and a more-than-human perspective premised on regard for all sentient beings (Abram, 2017; Plumwood, 1993; Wilson, 1984) to conceptually frame the study. This chapter will discuss this conceptual framework in greater detail, starting with a rationale for its appropriateness. The theoretical understanding behind a relational ethic of care and how it is conceptualised in this study are then discussed. This includes a discussion of place-responsiveness and the idea of nature as agentic. The kinds of changes in pedagogical practice required to enact this relational caring with(in) nature are then discussed, including an account of how indigenous perspectives on pedagogy are informing this conceptual framework.

2.2 FS as Relational Pedagogy

Wals (2017) posed the question as to what kind of learning places afford relationality, sense of place, belonging, empathy and care in light of the significant challenges we face in our schools. This is, says Wals, a question that *'is particularly crucial in times when forces in education and society seem to work in other directions which privilege independence, self-efficacy, personal growth, competition and taking care of one's self'* (2017, p.160). For Noddings, the answer lies in changing the structure of our schools to enable us to practice caring as the *'very bedrock of all successful education'* (2005a, p. 27). The primary aim of teachers is *'to promote the growth of students as competent, caring, loving and lovable people'* (2005a, p. 154).

There is a synchronicity with how Wattchow & Brown describe place-responsive pedagogy. Place-responsive pedagogy is about being in places where we feel our identity is affirmed, where we feel safe and so we want to care for these places who

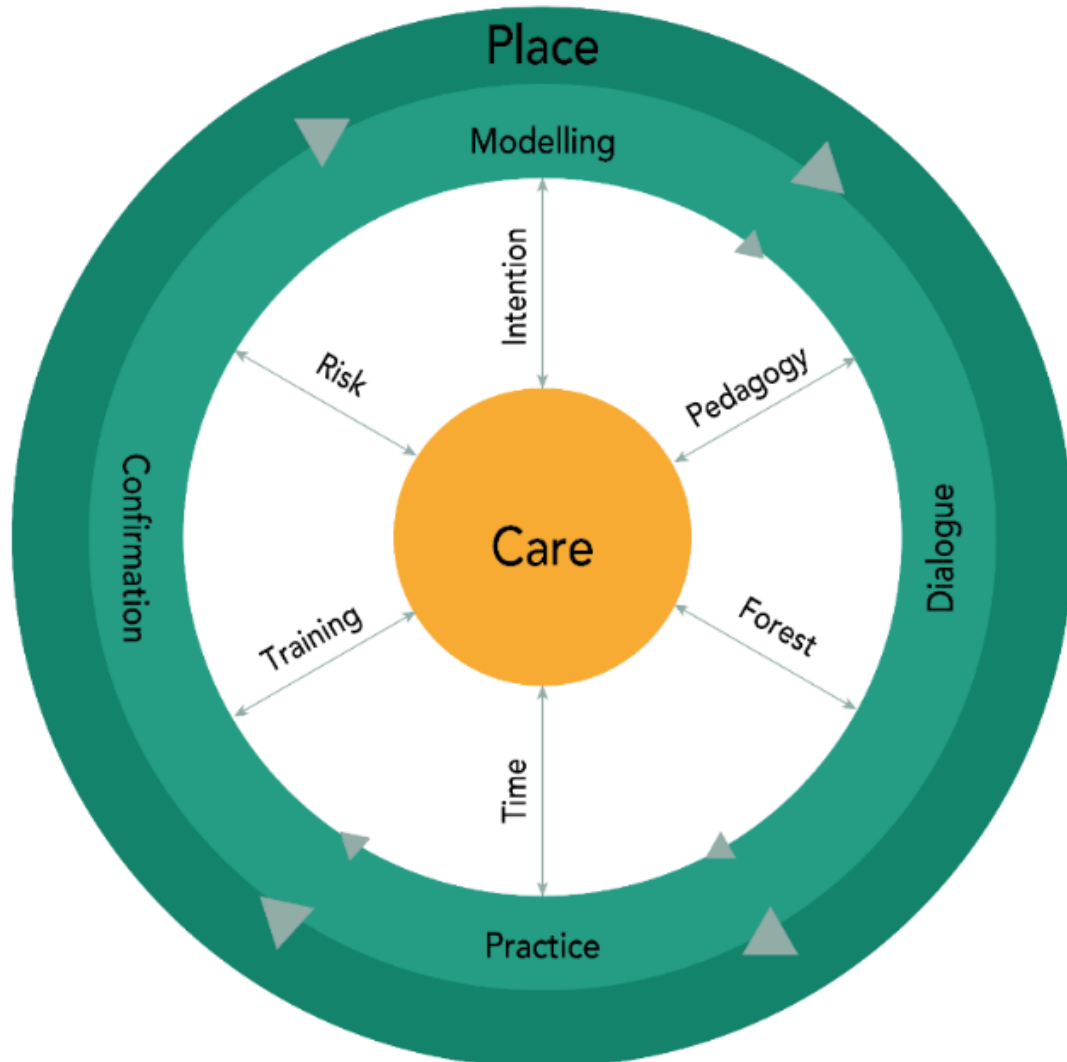
¹² Freire defines praxis as "reflection and action directed at the structures to be transformed." (Freire, 2017, p.99)

extend their care to us: *‘It is an active journey towards belonging. With belonging comes connection and the development of an ethic of care’* (Wattchow & Brown, 2011, p.196). Schools, mostly, inhibit such caring place-based values (Blenkinsop, 2012; Wals, 2017; Wattchow & Brown, 2011), associated with what Bonnett (2017) describes as the *‘scientism implicit in much of school culture [which] can have deleterious effects on the ability of pupils to inhere authentically in the space that formal schooling provides’* (p. 344). The scientism he refers to is the Cartesian fragmentation and rationality prevalent in our schools, leading to a neglect of the myriad non-verbal forms of discourse *‘by which we are steadily nourished and sustained by the more-than-human earth’* (Abram, 2017, p.279).

Describing FS as a caring relational pedagogy requires an acknowledgement, by us, as humans, that the natural world is animate. This is an *‘ontological shift’* that recognises an active role for nature as co-teacher, such that *‘the world literally speaks to us, not in our own language, but in its own; we become, as it were, bilingual’* (Blenkinsop, 2012, p. 356). This will be discussed more fully in later sections of this chapter. The conceptual framework is represented visually in Figure 1. The wheel symbolises the idea of schooling as an integrated, interconnected whole, mirroring living well on earth. The arrows symbolise the relational connection between all aspects of the framework. The hub of the wheel represents educational purpose. In this study educational purpose is about care, care for myself, for each other, for the natural world and for the world of ideas, in order to promote wellbeing and flourishing for all. The spokes of the wheel represent the six principles of FS. The extension of the site of learning that is ‘school’ to include local nature is represented by the darker outer wheel rim, place. In FS, the ‘forest’ is the primary site of learning. The focus in this model is on the **relational interaction, the reciprocity** between people, place and purpose, in contrast to a focus on people, or place, or purpose. FS, practiced according to Noddings four components of modelling, dialogue, practice and confirmation, with(in) nature, can potentially offer this kind of relational, caring pedagogy. An exploration of that potential is the aim of this study.

Figure 1

The Conceptual Framework



2.3 A Relational Ethic of Care – Theoretical Perspectives

For Noddings, caring starts from the premise that life is about *‘caring and being cared for in the human domain and full receptivity and engagement in the non-human world’* (Noddings 2013a, p. 174). This relational orientation means that an ethic of care must remain *‘tightly tied to experience because all its deliberations focus on the human beings involved in the situation under discussion and their relations to each other’* (Noddings, 1988, p. 218). Behaving ethically, as the ‘one-caring’ is about *‘meeting the other in genuine encounters of caring and being cared for’* (2013a, p. 175). The ‘one-caring’, the carer, displays engrossment and displacement of motivation during the caring

episode, towards meeting the expressed needs of the cared-for. The cared-for contributes to the relation by her response (Noddings, 1988). The experience of being ‘cared-for’ enables us to confirm the ‘cared-for’ relationship in our lives. In turn we learn to ‘care-for’ intimate others (that is those with whom we are in proximity, what Noddings calls the private sphere), as well as learning to ‘care-about’, those and that with whom we are not in proximity, the public sphere. So what does this mean for our schools?

Noddings (2005a) proposed a model of organising education around centres of caring for self, others, the natural and the ‘human made’ world and the world of ideas, using four components of modelling, dialogue, practice and confirmation. Care is the ‘*lens through which all practices and possible practices are examined*’ (Noddings, 2013a, p. 173). The ‘teacher’, as the one-caring, leads the caring relationship and helps children to be the recipients of care through gentle persuasion. Noddings (2013a) draws on Buber’s concept of inclusion when she says ‘*the teacher receives the student and becomes in effect a duality*’ (p. 177).

The primary concern for Noddings is the proximal connection between the child and the teacher, predicated on expressed needs: ‘*The teacher as carer is interested in the **expressed** (her emphasis) needs of the cared-for, not simply the needs assumed by the school as an institution and the curriculum as a prescribed course of study*’ (Noddings, 2012, p.772). Too often we presume to know what the other requires. This is especially true of relationships where there is an unequal balance of power, such as that of the teacher and the student or the parent and the child, particularly given the traditional silence of learner voices in western education systems. Noddings (2005b) suggests that this adherence to assumed needs inhibits opportunities for autonomy, intrinsic motivation and love of learning. This has the effect of silencing the cared-for; it is in effect prioritising the inferred need over the expressed need. This is the crux of Noddings relational approach. This is why relational caring in the public domain is difficult and why Noddings is tentative in her inclusion of nature in an ethic of care. For her, the ‘confirmation’ of the caring relationship is not so evident and so assumptions can take precedence over expressed needs. Caring at a distance is ‘*hard and uncertain work*’ (Noddings, 2005a, p.123). Noddings says: ‘*there is no fully adequate substitute for direct contact*’ (2005a, p.124), following Dewey:

No number of object-lessons, got up as object lessons for the sake of giving information can offer even the shadow of a substitute for acquaintance with the plants and animals of the farm and garden, acquired through actual living among them and caring for them (Dewey, 1915, p. 8).

This priority to proximity is shared by place theorists in their emphasis on how places create space for us as humans ‘*to become*’ (Wattchow & Brown, 2011, p. 70). The ‘*experiencing*’ of relationships in particular places is fundamental to the place-responsive experience. Mannion et al. (2013) describe place-responsive pedagogy as ‘*explicitly teaching-by-means-of-an-environment with the aim of understanding and improving human-environment relations*’ (p. 803). It is relational in orientation. Place-responsive pedagogy is supported by collaborative planning and open-ended, flexible teacher / pupil interactions in nature that are purposefully directed at better understanding of human-nature relationships.

Becoming more conscious of place is also about making pedagogy more relevant to the lived experience of the students and teachers by ensuring that schools are connected to, rather than isolated from, their communities, a position stated in different ways by all of these theorists. As Casey (2001) says: ‘*there is **no place without self** and **no self without place***’ [his emphasis] (p. 684). There is a tenacity in the ways that places exert their influence upon us (Casey, 2001). While it should be obvious that human health, wellbeing and flourishing are inextricably linked with the Earth’s living systems, mostly, we do not seem to act as if this is the case. This is a view long expressed by activists (Bonnett, 2012a, 2012b; Bowers, 2001; Charles, Keenleyside & Chapple, 2018; Gruenewald, 2003a; Orr, 2011; Pyle, 1993; The Care Collective, 2020) and now shared by mainstream commentators internationally (de Ruyter, Oades, & Waghid, 2021; UNESCO, 2015) as we try to heal our damaged earth.

2.4 Relational Caring and Nature

Noddings ethic of care is situated within a humanistic paradigm. Noddings is cautious about the reciprocity, the response, offered by the natural world. She is tentative, due to her concern that there is a reduced opportunity for proximity and a potential inability of nature to confirm the ‘cared-for’ relationship. Noddings agrees that our lives are interdependent with those of animals and plants, but when we talk about caring for the natural world, ‘*the ethical shades off into the sensitive*’ (Noddings (2013a, p. 160). In other words, we must extend respect to nature in deference to its role in supporting humanity. However, for Noddings, ‘*the relation, of necessity, falls short of the human relation and I must remember this as the protective feeling arises in me*’ (2013a, p. 161). She says we need to know more about the ‘*ways in which place-sensitive education might contribute to an education that is meaningful*’ (Noddings,

2002, p. 156). She goes on: *'It is hard to hate people who love their mountains, forests, fields, lakes, rocks and sky. Somehow, that love, while directed at particular physical features of a particular landscape, is universal in healthy-minded people'* (p. 156).

Aligned with the place theorists, Noddings (2002) acknowledges the deep need of humanity to affiliate with(in) nature (Wilson, 1984), comparable to the need to care. She highlights the importance of the experience of nature connection¹³:

It is one of those needs inferred by those of us who actually experience a connection to at least some natural places. What might be classified as an inferred need in children becomes an expressed need in most of those for whom the opportunity is provided. The need to experience living things in natural settings is, in this respect, comparable to the need to care. Children do not usually express such need, but, when they learn how to care, they cannot imagine living without caring for others. What was once a need inferred by wise adults becomes an expressed need (Noddings, 2002, p.170).

While the radical ecopedagogy and place-responsive theorists agree with Noddings on the importance of proximity for establishing relational pedagogy, they differ with regard to the responsiveness, or not, of nature. Indeed, it is the very entanglement of human and nature, in place, that is the basis of relational pedagogy from a place-responsive perspective. In this view, Mannion & Lynch (2016) say that agency *'proceeds dynamically along connective tissue, which allows for the enactment of a relationship'* (p. 89). Mannion et al., (2013) say that place-responsive pedagogy *'captures how educators make explicit efforts to collaborate in assembling people, places and purposeful activities together'* (p. 793) based on a view that place is as important as any social factors in an educational endeavour. Abram (2017) describes:

*An intimate reciprocity to the senses; as we touch the bark of a tree, we feel the tree **touching us** (his emphasis); as we lend our ears to the local sounds and ally our nose to the seasonal scents, the terrain gradually tunes us in in turn (p. 268).*

There is a shared understanding of the importance of the concreteness, the experiencing, of relational caring between Noddings and the place theorists and the ecophilosophers. However, the *'assumptions of underlying commonality with the cared-for made by care ethicists could be seen as interposing a filter that endangers a more direct connection with them in their otherness'* says Bonnett (2012b, p. 298). In other words, due

¹³ Nature connection describes a positive relationship between humans and the natural world. Sheldrake, Amos and Reiss (2019) describe it as a *'personal affinity and orientation towards nature...someone inherently valuing experiences of nature, enjoying being in nature, and feeling a perceived responsibility and sympathy towards nature'* (p. 4)

consideration is not extended to the moral significance associated with the intrinsic value of nature (Bonnett, 2012b). Abram agrees:

Only by giving primary value to the full-bodied world of our face-to-face and face-to-place encounters, do we have a chance of manoeuvring wisely, and well, among the many other worlds that now claim our attention...For we are human only in contact, and conviviality, with what is not human (2017, p. 284).

The critical importance of direct, early and ongoing experience with(in) nature in order to enable humans to access and to practice responding non-verbally is prioritised by Abram. Perception, as Abram sees it, is an interactive, ongoing, participatory dynamic of the sensing body with other sensing bodies, a kind of ‘*non-verbal conversation*’ (2017, p. 278). This view of nature as sentient, as agentic, is an essential part of a place-responsive pedagogy. For me, it is the relational ethic of care that is explicit in more-than-human epistemology that enables FS to be described as relational pedagogy.

In later work, Noddings (2013b), drawing from the work of Wilson (1984) on biophilia acknowledges that we are shaped by, and in turn shape, our environment. She describes the lack of opportunities for children today to spend time roaming freely in nature as ‘*a form of alienation very like homelessness*’ (p. 89). Abram (2017) too, highlights the importance of experiencing our local places: ‘*Only by being deeply **here** (his emphasis), in and out of this place, am I palpably connected to every other place*’ (p. 284). This is close to the place-responsive pedagogy of Wattchow and Brown (2011). They say:

The places we care for may be places where we live for most of our life (workplaces and homeplaces), but equally they may be recreational and pedagogical places that we are destined to know through our visits and travels (p. 55).

These theoretical ideas raise some concerns about relational caring. Pyle (2003) describes the idea of ‘reconnecting’ with nature as a nonsense: ‘*for people and nature are not different things, and cannot be taken apart*’ (p. 213). This is problematic for a relational ethic of care, which paradoxically requires a separateness, and a proximity, in order that the caring relationship can take effect. This leads Martin (2007) to conclude that ‘*a conception of nature as part of self and an ethic of care based on a relational self are logically incongruous*’ (p. 61). While acknowledging that relatedness must be fostered, Martin (2007) describes this relatedness as the ‘*solidarity of separate beings*’ (p. 62).

Perhaps it is more useful to explore the human capacity to value, to prioritise and to evaluate which governs the moral imperative upon us to care deeply about nature (Fien, 2003). This resonates with Plumwood's idea of the ecological self as: '*a type of relational self, one which includes the goal of the flourishing of earth others and the earth community among its own primary ends, and hence respects or cares for these others for their own sake*' (1993, p. 154 -155). Plumwood favours a relational understanding which: '*clearly recognises the distinctness of nature, but also our relationship and continuity with it*' (1991, p. 20). Plumwood goes on to describe this as '*an expression of self in relationship, not egoistic self as merged with the other but self as embedded in a network of essential relationships with distinct others*' (p. 20). This is a definition of relational understanding between sentient beings, that is helpful in describing the human relationship with the natural world (Plumwood, 1991). Such relations must involve '*particularity*' (or the proximity of Noddings) towards specific places, forests, animals, towards which one has specific responsibilities of care (the care-for that Noddings describes), not merely abstract ones (Plumwood, 1991).

McKenzie and Blenkinsop (2006) also point out the difficulty with receptivity and proximity in Noddings ethic of care as limiting. However, they go on:

These concerns should not limit sincere and diligent efforts to care beyond the proximate and receptive, since in an increasingly connected world, many of our activities are having a more substantive effect on the world at a distance' (p. 97).

While these are important theoretical considerations, they may overemphasise a separateness between caring for self, each other, the world of ideas and the natural world. This tension can be eased by focussing on ways we as humans *can* engage with nature in ways that value its agentic nature in enabling flourishing for all living systems. This will be explored in the following section.

2.5 Nature, Flourishing and Agency

There is a large contemporary literature on the positive impact on children of spending time with(in) nature (Barrable & Booth, 2020; Barrera-Hernández, Sotelo-Castillo, Echeverría-Castro & Tapia-Fonllem, 2020; Chawla, 2015; Kuo, Barnes & Jordan, 2019; Orr, 2011; Roberts, Hinds & Camic, 2020; Sheldrake et al., 2019; Sobel, 2014; World Health Organisation, 2016). These studies draw from divergent, cross-disciplinary, radical and mainstream theoretical understandings to describe compelling evidence of the benefits of spending time with(in) nature as part of formal education. Kuo et al., (2019) in a large-scale systematic review concluded:

The available evidence suggests that experiences of nature help children acquire some of the skills, attitudes, and behaviours most needed in the 21st century. 'Non-cognitive factors', such as perseverance, self-efficacy, resilience, social skills, leadership and communication skills...are increasingly recognised ...as essential in a rapidly changing world. And for generations growing up in the Anthropocene, environmental stewardship may be as important as any academic content knowledge (p. 6).

Being with(in) nature helps us to gain a better insight into all relationships (Blenkinsop & Fettes, 2021, 2020; Bonnett, 2012a, b; Cornell, 1989; Goralnik, Dobson & Nelson, 2014; Gray, 2019; Orr, 2011; Plumwood, 1991; Taylor, Pacinini-Ketchabaw & Blaise, 2012; Wattchow & Brown, 2011). Chawla (2002) draws from Wordsworth's belief in the ensoulment of the natural world and evokes parallels with attachment theory (Bowlby, 1958) in her description of the ways in which early experiences in nature 'prepare a foundation for a responsive give and take with the outer world throughout life' (p. 201). She sees childhood as having a particular importance in the development of our relationship with the natural world. The power of nature to restore, and to teach, is again underlined in her later work. Chawla, Keena, Pevec, & Stanley (2014) describe the impact of nature on the young people in their study: *'At every site... the students discovered values in the wooded areas, habitat and gardens that they were never taught by the adults who supervised them'* (p.12).

This kind of pedagogical 'emplacement' in nature: *'takes us into an infinitely extending and mysterious universe where the known constantly rubs shoulders with the ineffable'* (Bonnett, 2012a, p. 292). Some sense of this can be gathered from Bonnett's account of the effect on him of an 'idyllic' walk by a stream:

*In sum, our fuller, because more receptive, participation in such places (our being there) enlivens us and refreshes us. We engage in a multi-sensory embodied emplacement that enables an authentic acquaintance with nature...; a realm of understanding that lies beyond the abstractions of the natural sciences and that under the aegis of the metaphysics of mastery is in constant danger of being occluded by them. Only when we are properly receptive to, and participate in, the manifold play of what lies before us, that is when we are more fully **there** (his emphasis), emplaced - is our ecstatic consciousness 'fulfilled' and our responses can become more truly fitting (Stickney & Bonnett, 2020, p. 1092).*

We cannot know nature through a scientific lens alone; we must develop a relationship, in the same way as we make human relationships: *'a direct intimate, tacit knowledge that **affects** [his emphasis] and is capable of engaging all the senses'* (Bonnett, 2007, p. 714). He describes it thus:

*In feeling the resilience of this piece of grass underfoot, this piece of earth to the spade, this piece of wood to the chisel, in feeling the growing chill in the air and apprehending the brooding presence of storm clouds, we engage with the world less through a cognitive ordering and more through a receptive **sensing** [his emphasis] that is less susceptible to abstract generalisation and objectification (Bonnett, 2007, p. 716).*

Fasting (2019) explores this issue for children, drawing on Merleau-Ponty on the ‘communicative co-existence’ between ourselves and the world (p. 105). She goes on to say: ‘Children comprehend that their childrens’ places in nature understand them; they communicate. How is this to be explained? Children expressed that their places talked to them, non-verbally’ (p. 105).

It is the relational experiences we have in those places that help develop our sense of that place as special. So, the trees and ditches in a local field at the back of the houses where I grew up and where in the evening children from our road gathered and had rope swinging competitions speaks to me of such a place. A place of happiness and learning. Long built over now, I can still see those ditches and trees, holding us and our homemade rope swings. When I think of those times, I think of the powerfulness, the independence that my friends and I felt there. Pyle (1993) describes such places as: ‘places of initiation, where the borders between ourselves and other creatures break down, where the earth gets under our nails and a sense of place gets under our skin’ (p. xvii). The affective and sensory qualities of such experiences are highly engaging and these kinds of memories are influential in later attitudes towards the outdoors (Chawla, 2002, 2015; Pyle, 1993, 2002; Waite, 2010). Pyle (1993) says: ‘Everybody has a ditch, or ought to. For only the ditches- and the fields, the woods, the ravines – can teach us to care enough for all the land. (p. xix).

How to recreate those ditches and fields in our classrooms and our schools is the big question that has long been asked. These ideas can be traced back to Rousseau (1712-1778) who challenged the human/nature binary. He described ‘mind and body as almost the same thing’ (Ogilvie, 2013, p.72) and argued for a role for nature as teacher. So too, Froebel. Urban (2016) reminds us that nearly 200 years ago, Froebel placed the unity of the human and the natural world at the centre of his pedagogy. This is Froebel describing the child:

He attributes the same life to all about him. The pebble, the chip of wood, the plant, the flower, the animal — each and all can hear and feel and speak. In childhood there is a four-fold development of life – the child’s own inner life; his life in relation with parents and family; his life in relation, common to him and them, with a higher invisible Being; and, especially, his life in relation with

nature, regarded as endowed with life like his own (Froebel, 1826 [1912], p. 50, emphasis added, cited in Urban, 2016, p. 117).

These philosophical perspectives lead us to question the fundamental values of contemporary mainstream western schooling. Perhaps it is time to revisit the writings of these theorists through the lens of nature-based pedagogy, rather than through layers of public policy. This is the quest described by some of those who have written about FS.

Power (2015) in the Canadian context describes the starting point of FS as place, in which the child is: *'called to play by the vastness of space and time in front of them'* (p. 29). Morgan (2018) draws from eco-phenomenological perspectives to talk about trees in woodland: *'the associated mottling effect of light and dark, the presence of birdsong, found objects and found creatures all add up to a heady mixture of sensations to excite the whole being'* (p. 122/123). Kraftl (2015) describes a FS setting for a group of boys with emotional and behavioural needs as a more than social space: *'constituted through human agents (the leader and children), non-human 'natures' (birds singing, trees) and non-human objects (the tools being used), created by humans but enacting a powerful hold over the boys'* (p. 227). Mycock (2020) describes how in FS spontaneous 'edge' events, *'opened up a space of possibility for relational more-than-human learning that was responsive to imagining and caring for other worlds'* (p. 437). She talks of the children's *'unselfconscious becoming with the mud'*, which can *'liberate children from the constraints of formal curricula'* (p. 438). She concludes: *'These encounters and intra-actions provided opportunities for the children to recognise the agency of non-human others and to practice an ethic of care based upon an appreciation of the obligations of mutual vulnerability'* (Mycock, 2020, p. 438).

Opportunities to participate in FS as part of formal schooling enable us to potentially have these kinds of authentic, relational experiences in nature. Through this kind of experiential learning comes a deeper understanding of how nature and human flourishing are inextricably intertwined. Bonnett talks of nature (2012a) as a: *'dimension of experience* (his emphasis) *that to a greater or lesser degree is present (if sometimes at several removes, or indeed, as withdrawn) in all perception'* (p. 290). Traditional societies have much to teach us in that regard and this is explored in the following section.

2.6 An Indigenous Perspective

Within the Māori world view of *tākaro* (play), *'the world is an arena where Gods, birds and humans play and interact together with/in nature'* (Alcock & Ritchie,

2018, p. 84). It is recognition of this interconnectedness of all sentient beings that opens up the possibilities for relational pedagogy with(in) nature. This has been especially articulated by the Canadian FS movement: *‘Like Forest and Nature School, Aboriginal approaches to education emphasize experiential learning, peer-to-peer learning, and require people to take responsibility for their own learning’* (Forest School Canada, 2014, p. 13). Much FS practice as MacEachren (2018) points out, takes place on traditional lands. She highlights the importance of the inclusion of First Nation guidance to help Canadian FSLs *‘as they seek to reflect on the many cultural perspectives that serve to connect us more deeply with the land we live on’* (p. 90). In contrast, western education systems have sought to minimise indigenous perspectives on interdependence between species. This is a form of colonialist cultural oppression, a cultural imperialism that has sought to stamp out indigenous values historically. Schooling in its present form does not often *‘appreciate indigenous notions of an interdependent universe’* (Kawagley & Barnhardt, 1998, p.2). For the native student, *‘imbued with an indigenous, experientially grounded holistic perspective, typical approaches to teaching can present an impediment to learning’* (p. 3). Kawagley and Barnhardt (1998) point out that the inclusion of indigenous ways of knowing within formal education will benefit not just indigenous societies, but all societies:

Many of the problems that originated under conditions of marginalisation have gravitated from the periphery to the centre of industrial societies so that the pedagogical solutions that are emerging in indigenous societies may be of equal benefit to the broader educational community (p. 5).

There is greater recognition in the western world today that the exclusion of traditional ways of knowing are problematic (UNESCO, 2015). Yet, education systems as presently constructed still seem to be moving in the opposite direction. Noddings (2013b) is critical that: *‘we still seem determined to find one best way that will work for everyone on every topic’* (p. 98). Wals (2017) reminds us that children’s *‘innate capacities to care, to show empathy, explore, sense and create ... are capacities that they tragically seem to lose as they grow older and spend more time in schools’* (p.158). This is in part due to the fragmented approach to teaching and learning in our schools, which is helping to erode predispositions towards relational caring (Wals, 2017). Bowers (2001) highlights the importance of an understanding of tradition, not as an obstacle to be overcome, but as a rich heritage of ideas, what he calls the *‘historical continuities of the culture’* (p. 263). Indigenous pedagogy offers western education systems an appreciation of the unseen forces that drive our universe, something that can

only be understood *‘through detailed observations over long periods of time’* (Kawagley & Barnhardt, 1998, p.11). They go on to say that education everywhere must be realigned with the *‘distant memory’* of an ecological perspective towards *‘a new consciousness for a sustainable life’* (p.12). We need to understand the land *‘as something we are part of, something that lives in us and calls us to account before our myriad kin’* (Blenkinsop & Fettes, 2020, p. 1036).

Western education systems must take account of this lengthy reciprocal relationship between peoples and the land and make time for attention to *‘respectful listening and silent, attentive observation’* (Blenkinsop & Fettes, 2020, p.1041). There is an emergent critique within the FS literature of the absence of FS practitioners making these kinds of pedagogical connections *‘with the historical, cultural and spiritual meaning that forests may carry’* (Alcock & Ritchie, 2018, p.81). This is a view of nature as passive, a space, not a place. Pacini-Ketchabaw (2013) describe the *‘ignorance’* of indigenous perspectives in much FS. Much of the indigenous knowledge of the bushcraft movement has passed *‘unrecorded’* (Fenton, Playdon & Prince, 2020, p.2) in western bushcraft. MacEachren (2018) is also concerned that the respect with which Elders are held in indigenous cultures is not properly considered in FS practice, where *‘child-led’* is a term often used and often misunderstood. Learning through imitation is a primary component of First Nations pedagogy and so should have a place in FS practice. MacEachren says: *‘Elders are considered the knowledge keepers who are turned to for guidance and wisdom’* (2018, p. 94). She points out that FSLs *‘need a better understanding of the instinctive drive to imitate and must ensure that children are exposed to and engaged in meaningful activities that stimulate cognitive ability and physical mastery’* (p. 100). Despite this critique, the emergence of FS also represents an opportunity to make available these perspectives in our schools.

2.7 Curriculum, Pedagogy and Care

Previous sections have described the theoretical underpinnings of a relational ethic of care and place-responsive pedagogy, drawing on both the western tradition and indigenous perspectives. Noddings emphasis is always on relationship first and learning as a consequence of the nature of the relationship. This section considers how this theoretical framework can be expressed in practice. Noddings (2005a), following Dewey (1975), says that in a caring school, curricula must start with the experience and interests of the students. We show our respect for the full diversity of humanity by offering a variety of equally prestigious programmes organised around the core theme

of caring. Noddings (2013b) promotes an eclectic approach to curriculum development that is considerate of the needs of the individual, the nature of the subject and the needs of society.

Witte – Townsend and Hill (2006) also touch on these issues in a perspective that resonates with Noddings critique of the primacy afforded to academic success, prescribed curricula and outcomes focus, to the detriment of relational, caring pedagogy. Success in the current climate focusses too much on what Dewey called *‘formation from without’* (1975, p. 17). Instead, Witte-Townsend & Hill, (2006) propose, like Noddings, a relational approach. They say: *‘In classroom worlds, as a relational consciousness develops, pre-assigned groups may become communities in which invitations are made, accepted and refused’* (p. 378). This kind of relational, dialogical approach is a collaborative endeavour, where the teacher is *‘a catalyst for nurturing the conditions of dialogue rather than the sole agent’* (O’Brien, 2011, p. 33). The teacher and the learner working in dialogue suggests a: *‘cycle of praxis characterised by heartfelt reflection, challenge, dialogue and further reflection/action to contribute to teachers’ radical education and formation’* (O’Brien, 2011, p. 33). Such relationships are predicated on expressed needs. Ensuring that we respond to expressed needs must mean that every day opportunities for *‘sustained conversation and mutual exploration with an adult’* are available to the child (Noddings, 2005a, p. 53). Witte-Townsend & Hill (2006) put it effectively. We must:

Stop, stand still, watch, and listen – just that, nothing else, to be ready to begin. And, if we do not, how will the soft voice of children be heard across the conflicting interests of the educational community? (p. 386).

Witte-Townsend and Hill (2006) implore us to: *‘learn to acknowledge that a pedagogy without depth confines children in spaces that cannot contain their energy, a pedagogy that dims the light-ness of their being’* (p. 387). They draw on Greene (1995) where she calls on teachers to find pedagogies that repair the silences imposed by the administrative structures that suffocate our schools towards listening for the voices, especially those of children and the marginalised, and oftentimes of individual school communities.

Noddings (2013a) highlights Bruner’s idea of intuition as part of this listening and as pedagogically important in our schools. Blenkinsop, Telford and Morse (2016) also address the importance of allowing uncertainty and trust to enter the learning process, in order to *‘build on pedagogically fecund moments’* (p. 353). We have to be

prepared to become immersed in this kind of playful pedagogy, which often begins with a sense that this is just messing about, and over time leads to effective learning, fun, empowerment and healing (Young, Haas & McGown, 2016).

This playful approach to pedagogy moves us away from an over-reliance on analytical skills and understandings manifest in our privileging of *‘pre-specified curricula judged on observable outcomes measured by standardised tests’* (Bonnett, 2013, p. 262). He, too, highlights the importance of agency, of teachers and learners developing their own viewpoints. Education, properly understood, is: *‘intimately concerned with an individual’s being in the world’* (Bonnett, 2017, p.333). Bonnett (2007) describes a *‘more intimate, intuitive, non-logical style of encounter...one whose rigour derives less from superimposed rules upon experience and more from an open attentiveness to the things experienced’* (p.717). It is about emergent engagement with the curriculum, taking account of the not yet known. This requires that students (and teachers) *‘learn properly to love the self-arising in themselves’* [his emphasis] (p.719). He goes on *‘It is a matter of the underlying versions of human flourishing and the good life that are implicit in the ethos and practices of the school as a community and how they connect with life ‘outside’* [his inverted commas]. (Bonnett, 2007, p. 719).

In this view, accountability is judged in terms of regularly succeeding in providing opportunities to experience democracy, caring and critical thinking. In this model, schools must begin to learn to occupy a place that they are less accustomed to being. This new place is more reflective (Blenkinsop et al., 2016), more community oriented and potentially transformative. Sharing the place that is school with local nature, wise elders, community and listening are key to beginning that process. As Noddings (2013a) points out in such a context, the teacher skill set changes, and classroom management skills, for example, would not be such a high priority. The next section will explore some nature-based pedagogical practices based on these theoretical ideas.

2.8 Nature-based Relational Pedagogy to Challenge

Pedagogical frameworks that re-ignite the progressive ideals of Dewey in the service of relational, place-responsive experiential pedagogy and that have influenced the FS movement will be explored in this section. These frameworks all share a commitment to extending the place that we call ‘school’ to include local nature, a view of nature as agentic and a priority to caring relationships as foundational in our education systems. When we extend the site of learning in this way, there are

fundamental changes to the structure of the pedagogical encounter. This is about a priority, says Bonnett, to *‘pausing and taking time to dwell in places and landscapes ‘face to face’, so that their voices and those of their ‘more than human inhabitants’ can enter the educational enterprise’* (Stickney & Bonnett, 2020, p.1094). Like Noddings, Bonnett stresses that attention must be paid to the priority of the classroom as the *‘officially sanctioned site of serious learning’* (Stickney & Bonnett, 2020, p. 1094) and the manner in which time (that is, clock time) is *‘carefully structured and measured out’* (p. 1094), something he describes as *‘precisely not the kind of time in which nature occurs’* (p. 1094). Pyle (2016) describes this too: *‘The nub of the problem is the same everywhere for everyone: The world is too much with us. We are too preoccupied to hear nature’s music’* (p. 73). Bonnett (2012b) too prioritises engagement with place, not so much in terms of location, but more to do with a *‘felt’* sensing (p. 285). Sobel describes the ‘caring adult’ in FS: *‘modelling respect and appreciation for the surrounding beauty, and under whose wing children come to feel safe in and connected to the natural world. It is this connection that will give purpose and meaning’*. (Forest School Canada, 2014, p. 18).

This kind of pedagogical practice is evident in the differing but connected pedagogies of place-based relational learning described in the literature examined for this chapter. Wattchow and Brown (2011, p. 182) set out four dimensions of place-responsive practice. These are: being present in and with a place; appreciating the power of place-based stories; being willing to apprentice ourselves to places and a commitment to the representation of place experiences. Sobel (2013) advocates for an integrated curriculum that emphasises project-based learning, collaboration with our communities and local autonomy. Pyle’s (2003) nature matrix curriculum draws from Leopold’s land ethic.¹⁴ The goals of education will be literacy, numeracy and *‘essential acquaintance with the ecosystem of home’* (p. 212). This is the kind of authentic, agentic and interdisciplinary engagement which is central to place -responsive pedagogy (Beames & Brown, 2016; Beames, Christie & Blackwell, 2017).

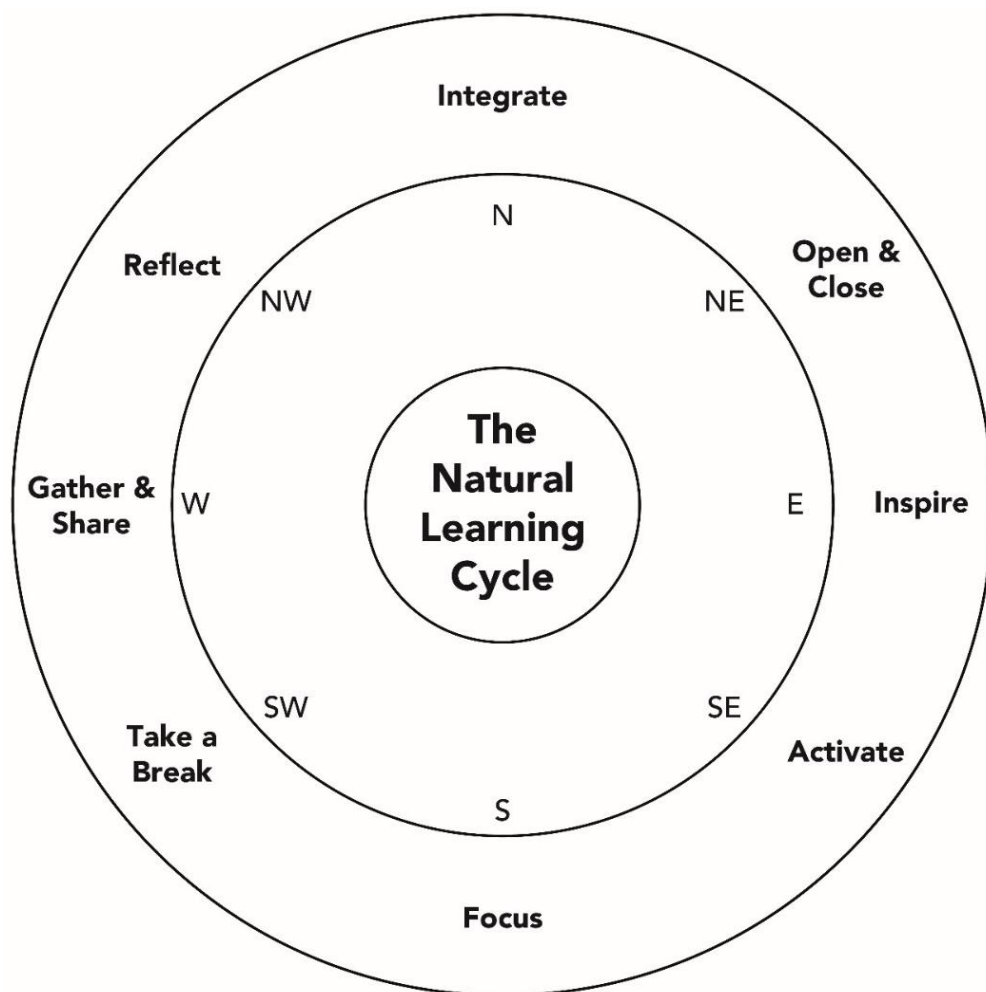
Joseph Cornell (1989; 1998) and his cyclical flow learning model is influential in FS practice worldwide. Young et al., (2016) used Cornell’s model and developed it into the natural cycle for learning with nature. Many of the ideas promoted by the theorists

¹⁴ *‘A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise’* (Leopold, 1968, p. 224/225)

discussed in this chapter are encapsulated in this approach to learning with(in) nature. As such it will be treated in more detail here. See Figure 2, The Natural Learning Cycle.

Figure 2

The Natural Learning Cycle.



Note. Adapted from Young et al., 2016, p. 211.

Linking the natural cycles of nature and traditional Lakota and Akamba spiritual philosophy, Young et al., (2016) set out an educational framework. The learning cycle begins and ends in the north-east, that predawn time of night and day, of mystery and uncertainty, of beginnings and endings. This is a time of not fully understood transition, from death to new life, towards the next cycle. As the sun rises in the east the day, and the learning, begin. Energy builds toward the south, the time of most focus and intense concentration. This is followed by the tending and the caring of the south-west

orientation, the ‘*siesta*’, as Young et al. (2016, p. 204) describe it, when we take time to care for ourselves, and for each other. As the sun sets, we gather as community to share the harvest of the day, the learning. The closing of the day in the north-west, is about elderhood, letting go, looking back, reflection and release. The north, associated with the dormancy of winter, is when we integrate the wisdom we have gathered towards leadership and growth.

This kind of progressive nature-based pedagogy is about bringing our unconscious awareness of the influence of nature upon us to a conscious level in our teaching and living, by orientating the ‘lesson’ to the natural cycle and to the eight points of the compass: ‘*Cultures everywhere observe a distinct and recurring cycle, which always has the compass directions as its unit of measurement and whose vectors have meanings drawn from the influences of the sun on life*’ (Young et al., 2016, p. 200). In this model, learning always begins and ends in the north-east, marked by a ritual of some sort to set the learning episode apart and so enable us to leave other concerns behind and pay attention. We mark the closing too, as we re-join the everyday with the new growth and learning we have gained.

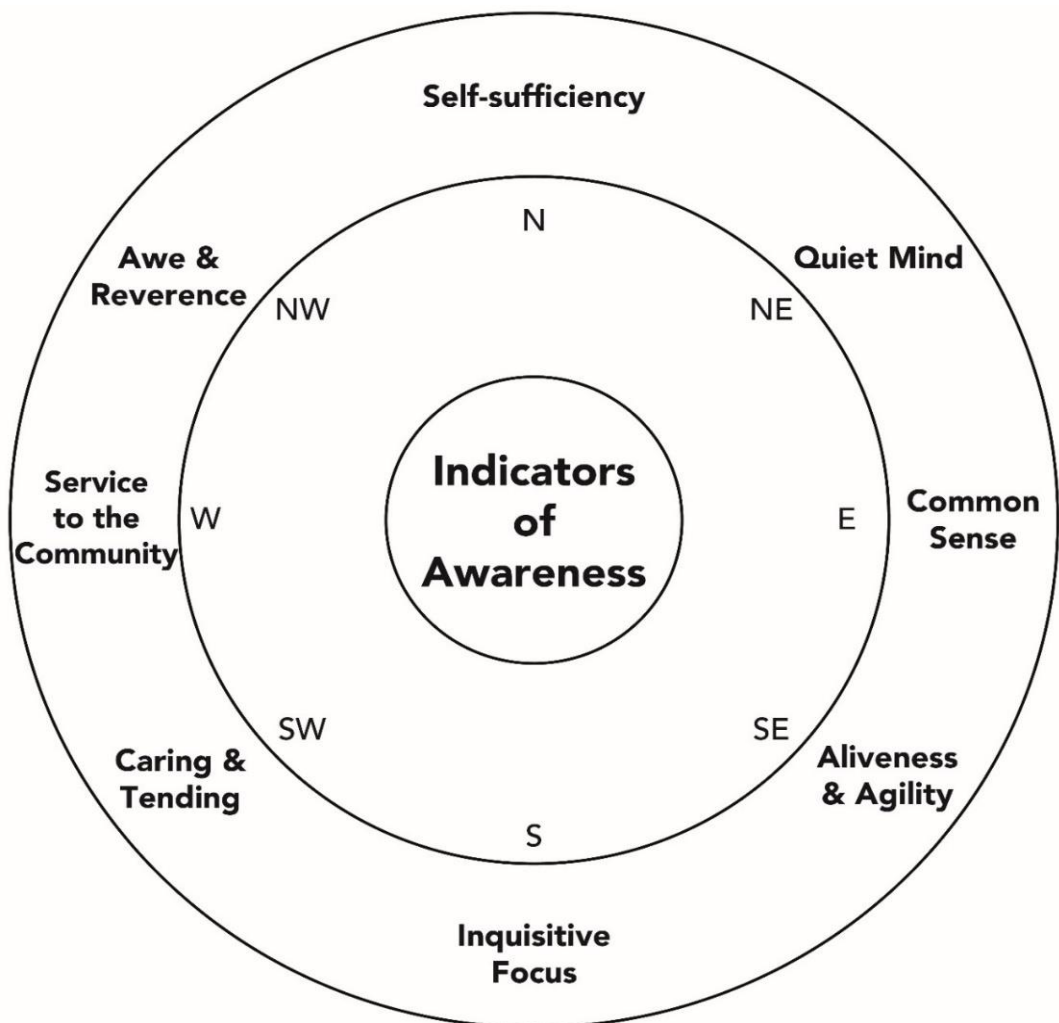
The model acknowledges that ‘*people aren’t necessarily ready for focussed learning when they show up*’ (Young et al., 2016, p. 209). This is more difficult to acknowledge and to respond to in the more regimented time schedules of the indoor classroom. The task for the adult, the mentor, the teacher, is to discern where this group of learners, both collectively and individually, are situated in the natural learning cycle in order to tap appropriately into the ‘right’ energy. The teacher too must also honour the process:

Forget the modern image of the teacher as some authoritarian armoured tank without a weakness or flaw. Get into the mud or muck, slip into the learning of the moment with everyone else, be vulnerable and human and authentically in awe of life’s surprises (Young et al., 2016, p. 237/238).

Assessment is different in this kind pedagogy. See Figure 3, Assessment - Indicators of Awareness.

Figure 3

Assessment - Indicators of Awareness



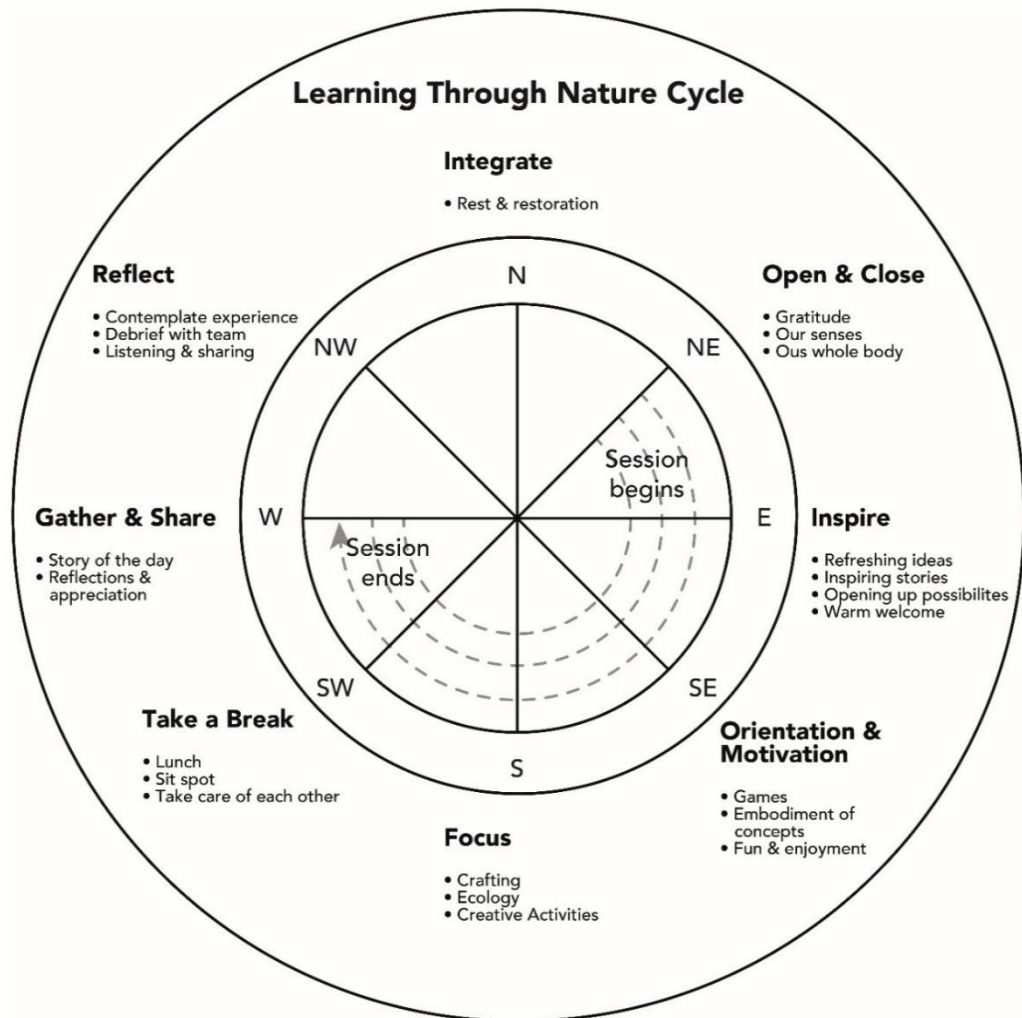
Note. Adapted from Young et al., (2016), p. 259.

Following the same cyclical cycle of nature and beginning in the east, there are eight 'indicators of awareness'. These are common sense; aliveness and agility; an inquisitive focus; caring and tending; service to the community; awe and reverence; self-sufficiency and a quiet mind. The type of activities and routines offered in the session must be judged then in accordance with these indicators. The task of the human teacher then, is to notice, to model, to find 'teachable moments' that promote these values. These values are mapped on the natural learning cycle. The east is common sense, foundational for working outdoors, associated with dressing well, managing risk,

understanding hazards and physical safety. Time and experience build common sense. The south-east is associated with being alive and agile, enthusiastic and engaged. Invited to grow, inquisitiveness is the intense curiosity and the focus absorbed energy of the south, the root of scientific thinking. Caring and tending is associated with the south-west. Learning to care for myself leads me to care for others and for the natural world. By tending to our physical needs first, we then begin to tend our emotional needs. From there we begin to extend our compassion and care towards others and the natural world. As we move towards the west, towards community, we are increasingly aware that we function ecologically with others and with(in) our world. We begin to understand how we contribute uniquely to community: *‘As people grow to appreciate their niche in the community, they notice others who fill different niches. Self-confidence leads to generosity and encouragement towards others’* (Young et al., 2016, p. 270). The north-west is about activating awe and reverence, the idea that there is something bigger than ourselves. This is associated with the tradition of the Elder in indigenous culture. It is about our active participation on our world: *‘Over time it evolves into a deep, spiritual acceptance of our responsibility for the health of the children and their environment... into the future’* (Young et al., 2016, p. 271). The north is about calm, self-sufficiency, problem solving and survival. It’s about building trust in yourself so that you can ‘go with the flow’. It is about hope and a deep knowledge that we can succeed. The quiet mind of the north-east is where we integrate and process our learning. This is a sense of *‘An intensely alert ability to be still, present, peaceful in the moment, and listen. We notice an active, unobtrusive receptivity to what is happening everywhere at all times’* (Young et al., 2016, p. 277). It is a peace of mind and a sense of stillness that activates gratitude. Ultimately, it is about the freedom that arises from the mutuality of flourishing in community. Cree and Robb (2021) have adapted the natural learning cycle to illustrate a FS session. See Figure 4, the Learning Through Nature Cycle.

Figure 4

The Learning Through Nature Cycle

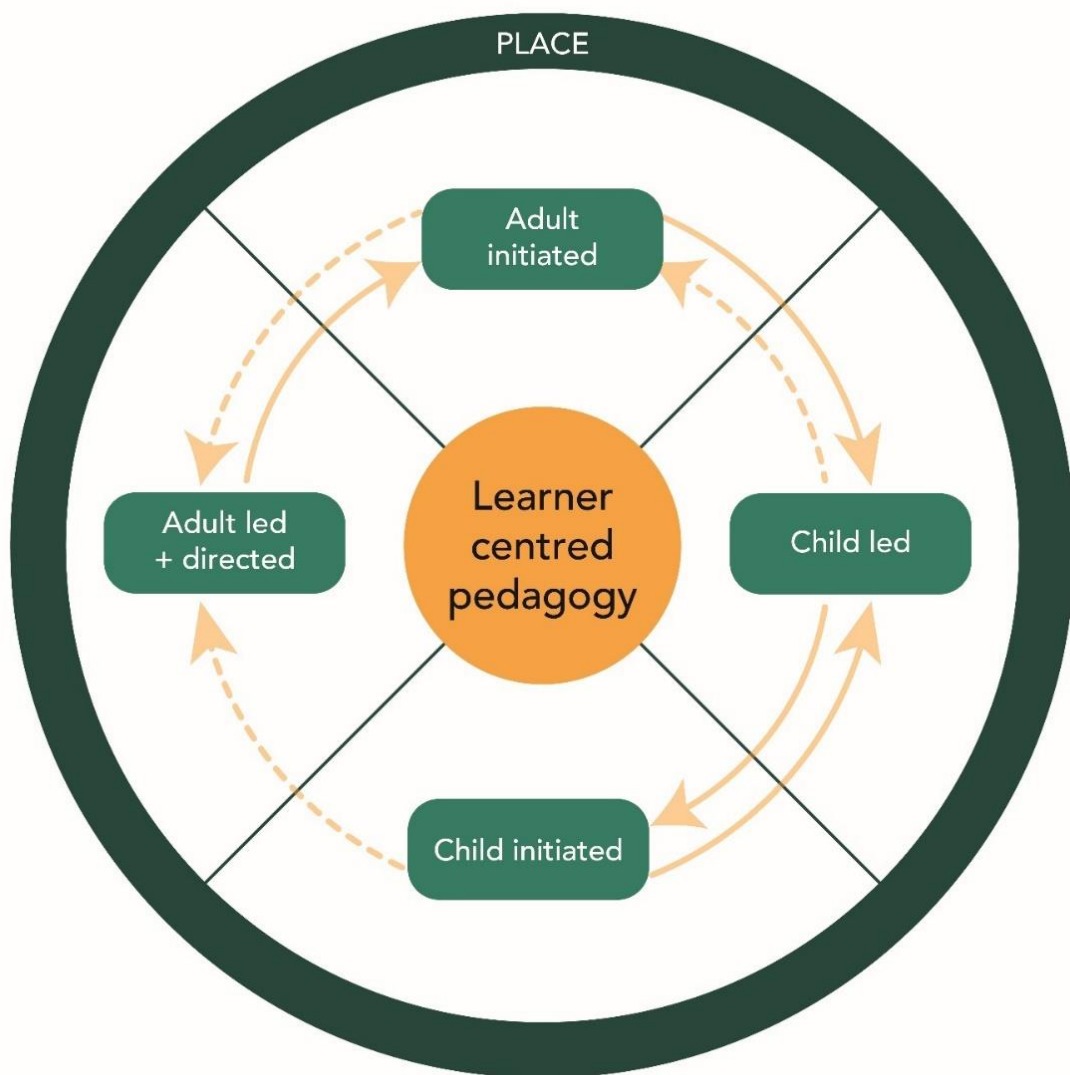


Note. Adapted from Cree & Robb, 2021, p. 263.

The learner-centred principle in FS is sometimes misunderstood in this model as a kind of ‘anything goes’ individualism, whereby the child can do whatever he or she likes and the adult has a minimal role in establishing and maintaining the pedagogical relationship. A more useful way of explaining it is to reference empowerment. It is about empowering the learner (who may be a child or an adult) to be in charge of their own learning (Cree & Robb, 2021). See Figure 5, Learner-centred Pedagogy.

Figure 5

Learner-centred Pedagogy



Note. Adapted from Cree & Robb (2021), p. 135.

In order to attain that goal of empowerment, learning may at different times need to be scaffolded, though learning being initiated by an adult, or a peer, or supported by an adult or a peer (Vygotsky, 1978). The learner-centred principle actively encourages learners to bring their previous experiences to bear as they learn with and from others, as Dewey also envisaged. I have adapted this model to include place to represent the active role that nature plays in this kind of pedagogy. It remains the role of the adult to ‘hold the space’. The key role for the adult is to recognise the level of participation at which the dialogue is happening. The learner-led principle is a misunderstood aspect of FS pedagogy that can minimise the relational potential of FS, in my view, if it is not

addressed. Cree (2009) describes the courage that the teacher requires to *‘stand back...and take on the responsibility of not interfering but observing and letting the learning flow’* (p. 23). It is the teacher who enables learner-centred pedagogy by their practice. However, it is important to acknowledge the difficulties of this challenge for teachers who are subject to powerful neo-liberal school systems. O’Brien (2011) says:

If they are the success stories of a rational and bureaucratic school system that recognises only particular and measurable forms of knowledge and effort, how will they recognise and respect other kinds of learning and ways of becoming, and moreover, care about these? How will they engage with or even begin to dialogue with learners who bring very different experiences of the world into their classrooms? (p. 31).

This commitment to the learner’s autonomy is evident in how some practitioners describe why they became involved in FS¹⁵. Cree (2009) describes FS as being about a shift in power which requires a particular type of facilitated approach characterised by observation and the FSL (the teacher) being *‘on tap’*, as he describes it, rather than *‘on top’* (p. 24). McCree (2014) described her very personal journey, coming to FS following a period living outside in all weathers. What for her were seemingly marginalised choices, associated with the realm of *‘tramps, mad people and other outsiders’* (McCree, 2014, p. 6) had a name. She describes seeking to work creatively in environmental education. Discovering FS for her: *‘opened up a space, where I could do what I did already, but now it had a name’* (p. 6). Marlene Power, the founder of FS Canada said her driving force was:

To try and infuse that sense of passion, inquiry, inspiration and attachment to the natural world, with the hope that it will have long lasting impacts on how we live and on the kind of leaders we are creating for the future (MacEachren, 2013, p. 230).

For Gans (2019) FS helped her to *‘better recognise [the world] as a place with its own lifeforms and rhythms, to be respected and cared for and not just used as a resource’* (p. 23). She highlights the challenges of nature-based pedagogy, which often gets romanticised as *‘filled only with beauty, pure enjoyment and awe...It also comes with challenges, risks and sometimes discomfort and pain’* (p. 173). Taylor (2019) describes

¹⁵ Autonomy is often used in the FS literature used in its general meaning of having choices and being able to exercise personal freedom. For me, that suggests an individualistic world view. A more appropriate term is self-determination, in the sense that Ryan & Deci (2000) have described it as comprising the three inter-related constructs of relatedness, competence and autonomy. All three of these psychological constructs are required for optimal flourishing and wellbeing.

FS as about supporting children's freedom even when that means '*overcoming my fears*' (p. 63).

The challenge for the educator then, in this context is to move towards a co-operative, co-teaching partnership with nature, with children, and with purpose (Blenkinsop & Beeman, 2010; Blenkinsop & Fettes, 2021, 2020; Jickling, Blenkinsop, Timmerman & Sitka-Sage, 2018). This move:

Loosens several of the defining structures of school: confinement in buildings and classrooms, a curriculum that is defined in detail before learning begins, dispersal of knowledge amongst varied holders and a hierarchy of knowledge centred in teachers and text books (Blenkinsop & Fettes, 2020, p.1038).

Wattchow and Brown (2011) describe this kind of pedagogy as: '*a gradual centripetal movement inwards as educator and learner continue to deepen their experience, knowledge and connection to particular places of significance and learning*' (p. 196).

Young et al., (2016) describe it as: '*coaxing out of individuals what nature has provided and stored away*' (p. xxvii). The challenge is to remove the primacy of the indoor classroom, the cultural weight it carries (Waite, 2013) towards a view of 'school' as comprising a broad set of physical sites of learning of equal value. Otherwise, learning outside the classroom may simply recreate the relationships that happen indoors and is associated with a '*rather narrow view of what learning might involve*' (Waite & Pratt, 2017, p.11).

2.9 Conclusion

This chapter has set out the conceptual framework of the study. Three literatures comprised a comprehensive conceptual framework for the study. Noddings (2002; 2005a; 2013a) relational ethic of care; Wattchow & Brown (2011) and Mannion et al., (2013) on place-responsive pedagogy and an eco-philosophical perspective on the embeddedness of humans in a more-than-human world (Abram, 2017). This study is about exploring the potential of FS to make our schools more relational, caring, place-responsive settings. This kind of school values experiential, embodied, collaborative approaches to teaching and learning. Such pedagogy is not easily realised in the indoor classroom. Introducing progressive nature-based pedagogy, such as FS, has the potential to promote relational caring in our schools. The capacity of nature to take us beyond ourselves is what enables this kind of pedagogy to be so powerful in tending flourishing. This is a view of schools as places where modelling, dialogue, practice and confirmation are the *modus operandi* of how relational understanding is practiced,

however imperfectly. Progression is measured by fidelity to pedagogy. These schools are places where community involvement is prioritised. The importance of an explicit statement of educational purpose or vision is highlighted in this process. FS is situated within a socio-constructivist paradigm, and draws from the pragmatic philosophy of Dewey. Nevertheless, in the current context of schooling, committing to praxis in our schools, through progressive nature -based pedagogy, will be a challenging and transformative act. This challenge is amplified when FS is practiced within current neo-liberal western education systems. The following chapter will explore how FS has risen, or not, to that challenge.

Chapter 3: Literature Review

Theorising the Tensions in FS Practice

I do know how to pay attention, how to fall down
into the grass, how to kneel down in the grass,
how to be idle and blessed, how to stroll through the fields,
which is what I have been doing all day.
Tell me, what else should I have done?

(Oliver, 1992, p. 94)

3.1 Introduction

This chapter describes and synthesises the relevant empirical literature on FS in order to inform the current study. The chapter begins with a short account of the emergence of the modern ‘English’ FS movement, contextualised within the wider historical, educational and public policy context. The guiding principles of FS pedagogy are set out. The empirical literature on FS is then explored. Firstly, the outcomes associated with FS pedagogy for children are outlined. This is followed by a discussion of the impacts on adults, particularly around their professional identity. The explanations offered for these outcomes and impacts, with an emphasis on the role of the six guiding principles of FS in enabling successful FS pedagogy, are then discussed. The place of nature in FS practice is also examined. As the FS movement has matured and grown worldwide, a more robust and critical discourse has emerged. This critique is considered under the themes of performativity and commodification. The chapter concludes by setting out the key themes that have emerged from this review.

3.2 ‘English’ FS

The history of the modern FS movement is widely documented. In 1993, early years staff and students from Bridgewater College in Somerset, England, visited a Danish ‘*skovbørnehaven*’ (forest kindergarten) on a study visit. Impressed with the opportunities afforded to the children to learn outdoors, the five staff members on the visit subsequently introduced the idea to the college crèche and in 1995 developed a qualification for those leading these sessions (Knight, 2009; Murray, 2003). The term ‘Forest School’ was coined to describe this approach (Knight, 2011; Williams – Siegfredsen, 2012) and the modern ‘English’ FS movement was born. The support of the UK Forestry Commission was pivotal at this stage. The fledgling FS movement met some of its educational objectives, particularly around sustainable development, nature connection and wellbeing (O’ Brien & Lovell, 2011), leading the Forestry Commission

to provide funding for research, resources and training. This included the key early series of research reports in England and Wales which described the features of FS and provided the first evidence for positive outcomes (Murray, 2003; Murray & O'Brien, 2005; O'Brien & Murray, 2006; 2007).

In 2004, a seminal review of OE in the UK, comprising a systematic analysis of 150 documents published internationally in the period 1993 to 2003 was carried out (Rickinson, Dillon, Teamey, Morris, Young Choi, Sanders & Benefield, 2004). There was just one published study on FS at that time, carried out by Murray (2003). This study was included in the above review. Rickinson et al. (2004) reported positive impacts related to self-confidence, self-esteem and team working skills; however, they also described the evidence as '*somewhat brief and anecdotal*' (p. 22). Subsequently the Learning Outside the Classroom (LOtC) Manifesto (DfES, 2006) was published, which set out to ensure that every young person in England should have experience of LOtC as an essential part of their education, given the '*strong evidence that good quality learning outside the classroom adds much value to classroom learning*' (DfES, 2006, p. 5). This development gave impetus to the emerging FS movement. In 2008, a FS group was established within the Institute of Outdoor Education, which led to the formal establishment of the FSA in the UK in 2012¹⁶. At this point, following much discussion, the FSA adopted a formal definition of FS and the six guiding principles (Harding, 2021).

The modern FS movement in the UK represented an alternative, grassroots social movement, situated within bigger social movements such as environmentalism, land rights, learner-centred education, natural play and the 'free range' childhood movement (Cree & McCree, 2012, 2013). Popular publications from activists like David Sobel, Tim Gill, Sue Palmer and Richard Louv during the early noughties also helped to promote interest in FS. FS had also captured the interest of a large public body, the Forestry Commission, amid increasing recognition of the benefits of learning in natural environments and increasing concerns about sustainability and environmental protection in society more generally. This happenstance link has determined the shape of FS in the UK, and facilitated its rapid growth in early years and in primary school

¹⁶ The Institute for Outdoor Learning is the professional body for OE across the UK. See <https://www.outdoor-learning.org/>

settings there. It was from connections made within English FS that the Irish FS movement began (see chapter one).

3.3 The Wider Historical Context

FS has a rich history within early years and primary school education, drawing on theoretical frameworks associated with theorists like Rousseau, Pestalozzi, Froebel, Montessori, Margaret Mc Millan, Susan Issacs, Steiner and Dewey (Cree & McCree, 2013). All of these theorists saw children as accomplished and competent and well placed to actively participate in decisions about their own learning. These theorists also promoted opportunities for children to experience nature in their local environment as part of their progressive approaches. FS also has antecedents in wider environmental and philosophical discourse, for example the German Sturn und Drang movement of the late 18th century, influenced by Rousseau and his classic text *Emile* (1762) and the Romantic movement of the first half of the 19th century. These movements all promoted the importance of an emotional connection with the natural world. The transcendental movement that emerged in the US in the 19th Century, associated with naturalists and philosophers like Henry David Thoreau, John Muir and Ralph Waldo Emerson, also promoted the idea of oneness between humans and nature. The contemporary US eco-philosophical movement, evident in the work of Aldo Leopold, Rachel Carson, Wendell Berry, David Orr, Robert Michael Pyle, David Gruenewald and others, shares a similar outlook.

These ideas from education, philosophy, psychology and environmental education coalesced in a number of different social movements and education and care settings in the twentieth century. They are often referenced as antecedents of the contemporary FS movement in the UK. These include the ‘open air movement’ of Margaret MacMillan in Greater London, in the early decades of the 20th century, with a Froebelian emphasis on imaginative play and a strong belief in all children, particularly those from the cities, or living with poverty, having regular opportunities to access the natural world (Cree & McCree, 2012). The Woodcraft Movement, founded in the US by Ernest Thompson Seton in the early years of the 20th century, promoted the idea of equality of decision making and encouraged living in the open and the teaching of appropriate skills (Shields, 2010). Indeed, Forest School was the name of a progressive school founded by Ernest Westlake (1855-1922) in England which was inspired by Thompson Seton and which promoted time in nature during school. Optional lessons were held outdoors and children were part of the governance of the school. Learning

was project based, with an emphasis on self-expression, freedom and meaningful activity. Special importance was attached to the experience of boys and girls, children and adults, learning to work and to play together close to nature (Shields, 2010; Westlake, 2000). Summerhill School, founded by A.S. Neill in 1921, shared similar democratic values. Founded with the intention of making the school fit the child, rather than the other way round, the philosophy of the school was based on the view that the child is innately wise and good (Neill, 1968). The Scouting Movement, founded in 1908 by Robert Baden-Powell, comprised a more prescriptive, adult-directed set of outdoor activities than FS. It differs from FS in its association with patriotism and militarism (Shields, 2010). Similarly, adventure programmes such as the Outward Bound movement, perhaps most famously seen in the founding of Gordonstoun School in 1934 in Scotland by Kurt Hahn, differs from FS in its emphasis on adventurous challenge and risk (Knight, 2016). The modern bushcraft movement, pioneered by Ray Mears in the UK in the 1980s, promotes autonomy and self-determination through living symbiotically outdoors. It *‘foregrounds a freedom and community which is implied by and has potential in, Forest School education, even if it is not often realised’* (Fenton et al., 2020, p.10).

3.4 Contemporary Influences

FS is most often associated with twentieth century Scandinavian cultural engagement with the outdoors. Less often mentioned in connection with the emergence of contemporary FS in Europe is the Art of Mentoring movement. However, those providing FS training in Ireland have links with the Art of Mentoring movement in the UK and they utilise this approach to varying degrees in their training programmes. Jon Young founded this movement in the US in 1984, with the late Norman ‘Ingwe’ Powell, as the Wilderness Awareness School (Young et al., 2016). Their recognition of the universal nature of mentoring across cultures led to the foundation of the Art of Mentoring organisation which provided adult workshops all over North America from 1995. Art of Mentoring is a radical approach to engage people with nature which promotes both the human-made world and the world of our ancestors as rich and complementary sources of education. Practice is based on a cyclical pattern of visits, explorations, and relationship-building, both in and with nature, in order to build nature connection. While an intuitive sense of connection is at the root of this radical approach, that does not exclude more formal scientific learning approaches: *‘When we embrace **fact** with **imagination**, and combine **logical evidence** with **intuition**, we*

*develop intellectual **understanding** through first-hand **experience*** (their emphasis)' (Young et al., 2016, p. 14).

These influences are evident in various combinations in FS practice, which McCree & Cree (2017) broadly describe as learner-centred, play-based, long-term pedagogy within a wooded or natural place. The recent (re)emergence of nature-based pedagogy in Canada and in Australia and New Zealand has brought a renewed focus in FS circles on indigenous scholarship and a deep respect for aboriginal stewardship of the land over millennia (MacEachren, 2013, 2018). All of these influences attend to how we, as humans, choose to interact with(in) nature, towards flourishing for all sentient beings. For Sobel, FS is a modern incarnation of Froebel's Garden:

It is a commitment to having children outside in all weathers for a goodly chunk of the day. This flips most educational models on its head. The norm is indoors for 5.5 hours a day, outside being frivolous half an hour a day. Instead, let us think about the outdoors as a provocative learning environment (Sobel, 2020, p. 1066).

More generally, the post WW2 years coincided with huge changes in prevailing views about children and childhood. The work of Bowlby, Piaget, Bruner, Dewey and others influenced the findings of the Plowden Report (The Plowden Report, 1967). This was the seminal educational policy document for primary education in the 1960s in the UK. It promoted a progressive and child-centred approach to curriculum in the UK and subsequently heavily influenced the modernising 1971 primary curriculum in Ireland (Department of Education, 1971). The Plowden Report promoted the idea that primary education should strengthen a child's interest in learning as of intrinsic value. The value of play, of learning by discovery, of observation, of experiential learning and of the local environment as stimulus for learning were fully endorsed, a position closely aligned with FS pedagogy.

However, by the late 20th century, changes were afoot. The 1988 Education Reform Act in the UK was, for radical educators, like a '*blanket imposition of a banking system, in which children became accounts into which information was deposited with the intention of drawing future dividends*' (Fenton et al., 2020, p. 4). The intensifying 'audit' culture inhibited progressive, cross-curricular nature-based pedagogy in the UK, despite the prevailing policy and rhetoric which promoted personal and social development in mainstream education and the use of a greater diversity of learning sites. The result was as Bettany, Cutting & Kelly (2017) highlight, the '*loss and even suppression*' (p.174) of imagination in contemporary English schooling. It was against

this background that the modern English FS movement emerged. The Irish educational context within which FS emerged is described in chapter one. By the second decade of the twenty first century, there was an emergent and rapidly growing FS movement worldwide (Boileau & Dabaja, 2020; Dabaja, 2021a, 2021b; Gans, 2018; Knight, 2013, 2018).

3.5 Guiding Principles

Murray & O' Brien (2005) identified five key features of English FS, which are closely aligned with the six guiding principles subsequently agreed by the FSA in 2012 and broadly adopted by the IFSA in 2016¹⁷. These are:

1. The use of a woodland (wild) setting
2. Links to the national curriculum
3. The freedom to explore using multiple senses
4. Regular contact for the children over a significant period of time
5. High adult to pupil ratio

These features were identified in all three case studies evaluated in the 2005 study, suggesting they were generic to all FS settings. The uniqueness of FS was the combination of these 'features' which '*when brought together provide an experience for the child that they would not get elsewhere*' (Murray & O' Brien, 2005, p.11). Murray and O'Brien (2005) described FS as an effective way to promote health and wellbeing across both physical and emotional domains; as being innovative and popular with schools and as associated with the creation of accessible local woodlands that could be used by schools. The practitioners involved in this series of studies wanted to see FS mainstreamed across all school settings. They highlighted the importance of the involvement of school staff and parents to build a shared understanding of this innovative approach to pedagogy in schools and early years' settings (Murray & O' Brien, 2005). This series of studies (Murray, 2003; Murray & O' Brien, 2005; O'Brien & Murray, 2006; 2007) formed the basis of the literature on FS practice and outcomes. These will be explored in the following section.

3.6 Outcomes

Murray & O' Brien (2005) set out eight themes relating to the impact of FS. Six related to children, as follows:

1. Confidence

¹⁷ The sixth principle, regarding trained leaders, was added at a later stage

2. Social Skills
3. Communication
4. Motivation and Concentration
5. Physical Skills
6. Knowledge and Understanding

Two further themes, New Perspectives and Ripple Effects, were associated with wider impacts on teachers and families. FS gave teachers a new perspective and a new understanding of children as they observed and interacted with them in a different setting. Ripple effects referred to positive impacts on families through children talking about FS at home, which sometimes led to family visits to woodlands (O'Brien & Murray, 2006).

Over the following decade, a myriad of small-scale studies were reported, mostly using the above studies as a starting point. Findings were almost all positive, local and often evangelical in their tone, not surprising given the local emergence of FS based on the 'passions' of individual practitioners. Particular emphasis was placed on the social and emotional benefits of participation in FS for children. Wide ranging benefits were reported across early years and primary settings (Horseman, 2010; Mygind, 2009; Nawaz & Blackwell, 2014; Vandewalle, 2010; Waite & Davis, 2007) in line with the findings of O'Brien & Murray (2006). Other studies reported positive outcomes associated with improved behaviour (Eastwood & Mitchell, 2003; Lovell, 2009); for children with additional learning needs (Bradley & Male, 2017; Pavey, 2006; Slade, Lowery & Bland, 2013); physical activity (Lovell, 2009; McCree, Cutting & Sherwin, 2018; Ridgers, Knowles & Sayers, 2012; Trapasso, Knowles, Boddy, Newson, Sayers & Austin, 2018); positive risk taking (Waters & Begley, 2007); social relations and wellbeing (Kenny, 2010); self-efficacy (Cook, Velmans & Haughton, 2012); confidence and sense of purpose (Ramsden & Tomlinson a, b n.d.); language development (Richardson & Murray, 2017); visual arts (Murphy, 2018) and generally across the formal curriculum (Lindemann-Matthies & Knecht, 2011).

The importance of FS to environmental education was emphasised in a reformulation of the original outcomes associated with FS by O'Brien & Murray (2007). This led Maynard (2007a) to conclude that while the evidence for self-esteem and learning styles may be overemphasised in FS, in some cases, opportunities for environmental education was underemphasised. This priority to social and emotional outcomes seemed to influence the reasons why settings became interested in FS, rather

than in other types of woodland and forest-based activities (O' Brien & Lovell, 2011). In contrast, more traditional forms of woodland education, such as OE programmes and one-off visits to forests were primarily concerned with improving environmental knowledge and behaviour. It seems that within woodland-based OE, FS was unique in its provision for promoting psychological and emotional wellbeing. A contemporaneous, quasi-systematic review carried out by Gill (2011) lends support to this thesis. Gill (2011) suggests that the more playful approach to pedagogy adopted in FS, in contrast to a didactic or '*curriculum orientated*' engagement is '*significant*' for '*both health outcomes and feelings about nature*' (p. 21). More recently, Waite (2020) reported that her expert international respondents saw FS as important for supporting creative self-regulated learners; however, in contrast to Gill (2011), FS was less important for promoting care for others and for the environment (67%) than field studies (70%), school gardening (74%), and visits to nature reserves (87%) and national parks (92%). The impact of FS on nature connection is discussed more fully in Section 3.9 of this chapter.

The link between physical and mental wellbeing outcomes (in contrast to academic and cognitive wellbeing outcomes) and participation in FS was consistently reported across different settings and participant groups across the FS literature (Barrable, 2020; Barrable & Aravantis, 2019; Blackham, Cocks & Taylor, 2021; Chawla et al., 2014; Elliott & Chancellor, 2014; Kahiriman- Pamuk & Ahi, 2019; Keogh & Graves, 2018; Kraftl, 2015; Manner, Doi & Laird, 2020; Marchant, Todd, Cooksey, Dredge, Jones, Reynolds et al., 2019; McArdle, Harrison & Harrison, 2013; McCree et al., 2018; Mygind, 2009; Roe & Aspinall, 2011; Sheldrake et al., 2019; Speldewinde, Kilderry & Campbell, 2021; Tillmann, Button, Coen & Gilliland, 2019; Tiplady & Menter, 2021; Trapasso et al., 2018). This has led to FS being less closely associated with academic and cognitive outcomes and sometimes seen as not delivering the formal curriculum.

However, that is a somewhat binary view which underestimates the complexity of pedagogy, as the first longitudinal study of FS carried out in England by McCree et al., (2018) found. This important study extended previous findings and robustly concluded that by enabling social and emotional wellbeing, FS also supported cognitive development and academic outcomes. Using a mixed-methods approach, with a priority afforded to children's voice and agency, this study tracked 11 five to seven year olds from disadvantaged backgrounds over three years, to examine the impact of weekly

sessions on their academic attainment, wellbeing and connection to nature. Compared with non-participating peers, their attendance and academic attainment improved. The authors concluded that FS can promote resilience and self-regulation, which in turn contributes to academic wellbeing and cognitive development. More recently, other studies have described similar outcomes (Coates & Pimlott-Wilson, 2019; Holm Jørring, Bolling, Nielsen, Stevenson & Bentsen, 2020; Kahriman-Pamuk & Ahi, 2019). However, Holm Jørring et al., (2020) in their Danish study of a sixth-grade class in a regular setting found that while participating in LOtC positively influenced social and academic wellbeing regardless of academic level for low achieving children, the learning environment may act as a distractor, especially for boys. Listening remained a challenge and so they are cautious about the contribution of such pedagogy to academic wellbeing for this cohort. However, one important finding for this cohort is that LOtC offers opportunities for other skills, for example physical skills, to be noticed by the adults. This was an important factor in promoting positive pupil identity for these children which would not be available to them in the indoor classroom.

3.7 Impact on Adults

While most studies focussed on outcomes for children following their participation in FS, a small number of early papers began to explore the role of, and the impact on, the adults who participated (Maynard 2007a, 2007b; Waite & Davis, 2007; Waters & Begley, 2007). Waite and Davis (2007) reported a higher level of adult-led instruction than anticipated in their review of a number of small-scale studies; however, FS had an alternative focus, even when situated within mainstream education. For teachers, participation in FS offered opportunities to (re)discover progressive pedagogy and to reconsider aspects of their practice and their professional identity in light of the pressures they felt under to achieve curriculum outcomes in the indoor classroom. The importance of training for facilitating and leading FS was highlighted by the differences observed in how FSLs and individual teachers approached FS. All three FSLs in Maynard's (2007a) study shared a view of children as being '*naturally curious and capable*' (p. 324) and so, when children were problem solving, they were "*given the space and time to think through...without immediate adult intervention or 'interference'*" (p. 324). However, for their teachers, this approach was very challenging. Maynard (2007b) suggests the teachers were subject to the dominant discourses of the national curriculum, of parents' potentially negative views and of potential 'risk' to do with physical safety. The FSLs resisted that dominant discourse.

The tension was exacerbated by being outdoors, where the normal discourse of the indoor classroom setting was weakened by the absence of walls and desks and chairs. Outdoors, the teachers were perceived as ‘*over-protective and over-controlling*’ by the FSLs (Maynard 2007b, p. 389). Ultimately, however, this initially challenging collaboration enabled thoughtful reflection on their pedagogical practices by the teachers and brought changes in how they interacted pedagogically with the children.

A recurrent finding is how participation in FS and training in FS pedagogy can allay teachers’ fears about risk and anxiety about taking children outdoors (Button & Wilde, 2019; Connolly & Haughton, 2017; Harper, 2017; Harper & Obee, 2020; Keogh & Graves, 2018; MacKinder, 2017; Marchant et al., 2019; Savery, Cain, Garner, Jones, Kynaston, Mould et al., 2017). Through observing the children in FS, teachers realised that children were able to manage their own ‘risky’ play. Mostly, these teachers found that children were more competent than the teacher had previously realised. Participating in FS improved the confidence of teachers with little experience of OE and also provided a framework for integrating OE into the formal curriculum (Prince, 2019).

The move outside to the less culturally dense (Waite, 2013) natural setting enabled teachers to explore their own pedagogical practice and beliefs in a way that was not supported in the indoor classroom. Relationships between adults and children developed during outdoor pedagogy, associated with a mutuality in teacher and student experiences outdoors that were much less likely to arise in the indoor classroom. Barfod (2018) gives the example of rainy days, when both pupil and teacher get wet. While initially teachers might revert to didactic approaches, over time and with support, teachers resumed (Glackin, 2018) or engaged more fully in (Marchant et al., 2019) dialogic practice. Elliott and Chancellor (2014) quote one teacher: ‘*there is no stuff, so the relationships are intensified, your role as a teacher is freed and you become stronger without clutter, it’s really quite empowering*’ (p. 51). In addition, this sense of empowerment and personal and professional wellbeing leads to increased job satisfaction (Barfod, 2018; Kemp, 2020; Kemp & Padgen 2019; Keogh & Graves, 2018; Marchant et al., 2019; Whincup, Allin & Greer, 2021). For these teachers, some of whom were also FSLs, participation in FS satisfied their need for professional autonomy, even though such participation often meant extra work, additional challenges associated with unforeseen events and potentially professional isolation from other colleagues. These studies articulate the challenges involved in changing teacher’s practice and how this is a long-term process that requires ‘*pedagogical development*

based on experience' (Marchant et al., 2019, p. 17). Tensions in teacher professional identities were mostly to do with the 'looser' style of pedagogy in FS (Whincup et al., 2021, p. 6) associated with supporting learner-led pedagogy. Some of these teachers described colleagues' views of FS as '*just playing*' (p. 8) and how as a consequence, FS was not assigned the status of real learning (Kemp, 2020; Kemp & Padgen 2019). But these adults also found ways of adapting to overcome these challenges and also acted as persuaders of others to encourage them to take on this challenge (Kraftl, 2015; McCree, 2019; Whincup et al., 2021).

3.8 Pathways to Success

This aspect of the review will concentrate on how positive outcomes associated with wellbeing and flourishing were achieved in FS, in line with the conceptual framework of the study. Early studies identified the opportunity FS provided to participate in holistic, experiential pedagogy (Maynard, 2007a; Waite & Davis, 2007) as key. This was associated with having sufficient time and opportunities to make choices, within a structure that enabled the participants to feel secure, combined with long term engagement in nature. Cree (2011) in his account of working with a group of boys who had been excluded from mainstream school says successful FS is:

All down to being out in the woods over a long period of time and building relationships and understanding (or to be more precise, empathy) ...based on an understanding of the situations that many of them are coming from, and then really being able to identify with the feelings their situations invoke. There is no quick fix or magic wand; it is down to a consistent, long term, firm relationship with a mentor based on firm boundaries (p.107-108).

Opportunities to experience being nurtured, and how being in nature facilitated that potentially powerful restorative impact, particularly for at risk children, was a key mechanism for the promotion of wellbeing in FS. Roe & Aspinall (2011) associate this with the sense of '*homeliness*' (p. 547) in the rituals of eating, and spending time around the camp fire. Opportunities to build dens and shelters and to rest in hammocks supported the building of trust, and provided possibilities for reflection on previous experiences that led to growth. FS seemed to offer more solutions, behaviourally, to the boys in this study who were suffering from extreme mental trauma. This caring pedagogy was also reported by McArdle et al., (2013) for younger at-risk children, the authors noting '*how small the input of nurturing needs to be before significant change is apparent*' (p. 239). The nurture begins with greeting the children off the bus and caringly helping them to attend to putting on their outdoor clothing, leading the authors

to say: *‘even the saddest, most anxious child in our cohort, we have found, could discover joy’* (p. 248).

These authors highlight the small group size, the high adult to child ratios, and the natural environment as all helping this process along. McCree et al., (2018), drawing from Roe and Aspinall (2011) on restorative learning approaches in FS, set out to go *‘at the children’s own pace’* (p.1). This resonates with the priority Noddings attaches to expressed needs in relational caring. The project was designed to promote wellbeing and self-regulation, with a particular focus on respecting the children’s autonomy. The focus was not on the activity or indeed the outcome, but *‘on their inhabiting a living space, regularly, playfully, over a substantial period of time, with a freedom to choose, time alone and in company, alongside a positive integration with school life’* (McCree et al., 2018, p. 14). The authors acknowledge that this can be viewed as *‘the scenic route’* to academic achievement, but are unequivocal that FS closed an academic attainment gap for this cohort of children. They highlighted the support of school leadership and the role the values and culture of the school more generally played in the success which was evident in their study.

Tiplady & Menter (2021), too, highlighted the importance of a collaborative culture and high adult to learner ratios as key pathways to success in their evaluation of the impact of FS for two groups of young people who were unable to access mainstream education due to severe anxiety and/or social and emotional issues. They highlighted the presence of adults, other than the class teacher, with whom the young people could build relationships as providing an *‘alternative dynamic’* to the indoor classroom. This was noticed by the young people and corroborated by a decrease in reported behavioural incidents over the year. A key finding was that the FS setting enabled the young people to benefit in different ways according to their needs. This recognition that wellbeing varies for different participants was key. For some, FS provided space to be physically active; for others it was the opportunity to relax in nature; yet others drew from the enjoyment and fun and challenges they experienced. Tiplady & Menter (2021) found that the young people in their study experienced FS, and being in nature, as a pedagogical space that was significantly different to the indoor classroom. The learner-centred principle of FS was crucial to each young person being able to access what they needed from the experience of participating in FS and to providing opportunities for teachers, too, to exercise autonomy and self-determination towards growth.

Autonomy, in its association with self-determination (Ryan & Deci, 2000) goes to the heart of transformative approaches to learning that support flourishing and wellbeing (Dirkx, 1998). Autonomy is promoted through providing opportunities for learners to reflect on their world and in turn enabling these young people (and their teachers) to enact change (Manner et al., 2020). Self-determination in FS is associated with positive opportunities to make meaningful choices and having opportunities to participate in risky and challenging activities within a safe pedagogical structure (Barrable, 2020). Coates & Pimlott-Wilson (2019), like McCree (2019), suggest that when children take (or are afforded) responsibility for their own learning, there is a change in how power relationships are enacted at different levels. Coates & Pimlott-Wilson (2019) demonstrated how this extended to how the children perceived their teacher. In FS, the children perceived their teacher as a participant in the FS school session, rather than as an instructor. This led to the teacher being seen as more ‘*more relatable*’ (p.12), not just in FS, but back in the indoor classroom too. Coates and Pimlott-Wilson (2019) suggest that there is a complementarity to different pedagogical approaches, a blurring of the lines between child-led, adult-led and adult-guided learning, both within the sessions and between the sessions and the indoor classroom. It seems that the children were able to interpret these different pedagogical approaches in meaningful ways. While not all the activity observed was child-initiated, the ‘*support the children received was*’ (Coates & Pimlott-Wilson, 2019, p.16). In other words, these adults demonstrated appropriate scaffolding of the child’s learning, aligned with the Vygotskian basis of FS pedagogy. Harris (2018) explores this in her discussion of how adults and children co-create a learning environment in FS through renegotiating boundaries between adults and children and indoors and outdoors. This was an early observation of Murray & O’ Brien, who suggested back in 2005 that FS provides an important opportunity for ‘*regular and critical observation of the ways children take advantage of given freedoms to express themselves physically and verbally*’ (p. 74). It can be concluded that FS provides a pathway to wellbeing through promoting opportunities for this kind of self-determination. This is achieved through progressive pedagogy associated with freely chosen play in nature, having choices and being trusted as competent.

Speldewinde et al., (2021) also explored this idea in their Australian study of bush kinder, where the children spend four hours, once a week, in nature. A key success measure was the development of children’s capacity to notice and how, in turn, that

noticing was recognised by the adults. This helped adults to think about how children interpret and understand their world. They found that such noticing helped the adults to see how children develop and demonstrate persistence, social and emotional learning, heightened awareness, the ability to make predictions and to witness changes in nature. This is akin to the place-responsiveness (Mannion et al., 2013) and the attention to expressed needs which Noddings promotes. Speldewinde et al., (2021) suggest that this kind of noticing by children, which was increasingly informed by dialogue, is a key scientific skill that enabled these children's understanding of nature to move from the status of nature 'novice' to nature 'expert' by the end of one year in bush kinder. Noticing how children inhabit their world is a key pedagogical skill for the adults that is fostered in FS

FS is also associated with more opportunities for both adults and children to collaborate. Classroom-based learning was more likely to be an individual endeavour, whereas in FS there were many more opportunities to learn collaboratively with peers (Coates & Pimlott -Wilson, 2019; Lerstrup and Konijnendijk van den Bosch, 2017) Kraftl (2015) shares this view, suggesting that the more than social spaces and places of FS provided for intimacy in relationships between adults and children and between peers. This is, he suggests, often a defining feature of 'alternative' education spaces. Alternative settings are also fundamentally different in their social rules, cutting across different age groups, challenging the didactic role of the teacher and allowing the use of sticks, fire and knives (Kraftl, 2014). The revered and respected precious material that was 'the stick' in the Harwood and Collier (2017) study, for example was '*banned*' (p. 348) within the regular play area and childcare centre for those same children. These kinds of opportunities foster an implicitly reflective and communal stance as Chawla et al., (2014) describe, where '*Individual child actors are not at the forefront of this scene but part of the collective and relational flow of action*' (p.348). At the same time, the importance of close links to the regular setting and the indoor classroom is also emphasised as essential to fully realise the potential of FS pedagogy (Sharma Brymer, Brymer, Gray & Davids, 2018; Knight, 2016). The foundational role of nature in this kind of pedagogy will be discussed in the following section.

3.9 Nature in FS

While being in nature is a guiding principle of FS pedagogy, and the literature on FS makes reference to this principle in their descriptions of practice, somewhat surprisingly, it has not been a main focus of the empirical studies of FS until recently

(Harris, 2021). Smith, Dunhill & Scott (2018) reported no published study of FS which focussed specifically on the potential of FS to foster a relationship with nature and just one study (Turtle, Convery & Convery, 2015) which investigated pro-environmental attitudes following participation in FS. This has changed in recent years. Harris (2021) described fostering a relationship with nature and place as *'fundamental'* (p.11) for some of the FSLs in her study and suggested there was evidence that these FSLs were successful in achieving this aim, through adherence to the principles of FS. A post-humanist perspective is emergent in the published literature on FS (Adams & Beauchamp, 2021; Cummings & Nash, 2015; Harwood & Collier, 2017; Kahriman-Pamuk & Ahi, 2019; Rios & Menezes, 2017). The post-humanist perspective in FS is associated with greater attention to place in FS practice, with indigenous knowledge as integral to FS practice and with a view of nature as agentic.

Increasingly FS practitioners are sensitive to nature connection in their pedagogy and how this in turn enables an ethic of care. Elliott and Chancellor (2014) maintain: *'the power of natural places to embrace humans and carry them towards new understandings and relationships must be recognised'* (p. 52). It is the emphasis in FS on allowing the natural features of a place to teach the children that is novel for many educators and so *'pedagogically, FS disrupts the traditional role of teacher in school'* (Harper, 2017, p. 321). Kahiriman- Pamuk & Ahi (2019) found that the more experience of natural places the children had, the more it afforded meaning to them, which in turn promoted a sense of belonging and stewardship. Coates and Pimlott-Wilson (2019) say: *'Being outside appealed to the children and they associated it with feeling refreshed, active, playful and childlike'* (p. 8). The affordance and open-endedness of nature as an environment for learning is supportive of autonomy and self-determination (Barrable & Aravantis, 2019; Chawla et al., 2014; Fjørtoft, 2001; Rios & Menezes, 2017; Sharma-Brymer et al., 2018). Harris (2021) best summarises these studies when she describes the pathway to flourishing in FS as being about experiencing regular and repeated activities in a natural setting, where children learn *'to overcome fear and have fun, connect with nature, develop an affinity for the location, and develop an ethos of care for the natural environment'* (p. 11). While the affordance of the natural space is foundational, Lerstrup & Konijnendijk van den Bosch (2017) note *'there is no simple causal relationship. Time and adult support may be needed for...discovering meaningful action possibilities of environmental features'* (p. 59). It is the intermingling of culture and nature that is the essential factor, the importance of

understanding the forest as a pedagogical space, with agency (Wattchow & Brown, 2011). Harris (2021) says that 17 out of 20 FS practitioners in her study prioritised children developing a relationship with the forest, an ethic of care and pro-environmental behaviours in their FS practice. For six of these practitioners, encouraging attachment to place was fundamental to their practice. Successful projects were enhanced by adults who understood the woods as a pedagogical space (Speldewinde et al., 2021). However, there is limited guidance for teachers in this new role (Elliott & Chancellor, 2014; Harper, 2017), something that highlights the importance of training for those leading FS sessions.

3.10 The Challenge of Exponential Growth

By the end of the first decade of the 21st century, Lovell, O'Brien and Owen (2010) described FS as probably the most widely documented education and learning initiative taking place in forests and woods in England, Scotland and Wales. From no recorded FS projects in London in 2005, by 2010 there was evidence of almost 150 schemes (Gill, 2011). By 2011, FS in England was being described as the '*gold standard*' of forest and woodland-based education (O'Brien & Lovell, 2011, p. 56). The Natural Connections report (Waite, Passy, Gilchrist, Hunt, & Blackwell, 2016) in England, which documented 125 primary schools outdoor curricular teaching noted that FS training was the most widely available formalised outdoor teaching training used by the schools in their study. This growth is paralleled worldwide.

However, the very success of FS may lead to its undoing as a progressive pedagogy. Recent years have seen the emergence of a more robust critique of FS which was explored in a special issue of the *Journal of Outdoor and Environmental Education* (Leather & Quay, 2018) devoted to FS. Two main tensions were discussed. Firstly, the prevailing culture and structure of mainstream schools in western education systems, with their intense focus on outcomes and performativity, makes it likely that FS may struggle to maintain fidelity to the guiding principles in this educational context. This raises the question as to whether FS can co-exist within such systems and if so, how can this best happen. A second tension relates to FS as pedagogically limited by a commodified, programmatic structure that is neither radical, nor place-based and where the FS practice in many settings cannot be described as progressive or culturally congruent. While these tensions are primarily philosophical, practical constraints can also impact both of these areas of tension. The following sections will explore these

issues in turn in order to set out how these matters are being resolved, or not, in practice.

3.11 Performativity

The growth of FS within mainstream western education systems means that it is subject to the structural influences of those systems (Waite & Goodenough, 2018). Ideological tensions about performativity (Harris, 2018; Kemp, 2020) and the increasingly technocratic view of teaching which prioritises performance over pedagogy led Waite and Goodenough (2018) to suggest that innovative pedagogical practice, like FS, is seen as outside the main business of schooling. Accountability and assessment regimes mean that outcomes are privileged over pedagogical approaches and *‘children confined by expectations that they complete a pre-planned schedule of activities’* (Waite & Goodenough, 2018, p. 37). There is also a concern that if FS is seen as a compensatory education programme for those who find classrooms constraining or as a *‘treat’* for most learners (Mc Cree & Cree, 2017, p. 226), then it is placed outside the educational offer of the setting. This strengthens the status quo by removing those who don’t ‘fit’ existing mainstream provision, the antithesis of caring, relational pedagogy.

One view is that FS offers a ‘respite’ from these neoliberal pressures and can co-exist with existing school structures to provide a space of pedagogical difference and a break from the pressures of mainstream schooling (Waite & Goodenough, 2018). Waite and Goodenough (2018) suggest that FS can offer an alternative approach, or a *‘relative cultural lightness’* (Waite, 2013) that *‘permits or even encourages new ways of interaction’* (p. 29). Kraftl (2015) also situates FS in the alternative space, in the sense that FS differentiates itself from mainstream public provision associated with didactic approaches and instead promotes, indeed privileges, relationship, experiential learning and dialogic teaching. The aim of alternative settings like FS, in this view, is to interrupt and recalibrate the habits we associate with ‘school’. Kraftl (2015) acknowledges that most of those attending FS are either also attending regular school or hoping to return there. But he sets out questions for us to ponder about the ‘alter-relations’, the changed relationships, associated with such alternative spaces, which offer a complex response to complex issues. For Kraftl (2015) there is as much *‘resonance as dissonance between alternative and mainstream and diversity within the mainstream’* (p. 233) which we must consider in positioning innovative or alternative pedagogies in our school systems. For him, FS can work within the ‘established’

mainstream ‘*with a twist that makes greater room for notions like mess, intimacy and love*’ (Kraftl, 2015, p. 233).

This is different to what Waite and Goodenough (2018) see as the ‘place’ of FS within current school structures. Kraftl goes further than they do towards a questioning of the present structures. There is emergent movement towards Kraftl’s view in the FS literature (Coates & Pimlott-Wilson, 2019; Harris, 2018; Kemp, 2020; Manner et al., 2020; Pimlott-Wilson & Coates, 2019; Whincup et al., 2021). This is associated with how schools and individual actors within schools enact their agency to resist, and reset, mainstream discourse, or not, in line with their educational purpose. These tensions can be exerted at the level of an individual member of a school community or at school level or more widely at systems level, where activists seek changes to existing school and education structures from the outside.

Kemp (2020) offers four positionings for FS pedagogy with regard to how teachers and schools interact with FS. In this view there is an implied variability in engagement with FS. First, FS can complement mainstream practice and meet the standards agenda, particularly for those who find the indoor classroom confining, as described by Waite and Goodenough (2018). Second, schools can reject FS as it does not align with the performativity focus. In these schools, FS is not offered. Third, FS is provided as an external service to schools; schools are consumers and the experts come in to deliver FS. Potentially, this approach can meet the principle of holistic practice, depending on how the school envisions their FS practice. MacQuarrie (2018) is critical of FS in this regard. If FS is not integrated into ongoing curricular provision, and delivered by teachers themselves, it is difficult to see how it can confer benefit over the longer term. Fourth, schools and teachers are positioned as agentic, able to draw on the principles of FS to initiate change from within. In this view, there is ‘resistance’ on the part of a school leader (or an individual teacher or school) to follow the diminished vision of educational purpose associated with a performative focus (Cudworth, 2021; Kemp & Pagden, 2019). Whincup et al., (2021) describe how teachers who were also FSLs exercised their agency to disrupt, to varying degrees, the neo-liberal value system in their schools. Strategies included adapting their FS practice to accommodate neo-liberal tensions, such as making explicit links to the formal curriculum; resisting pressure to adhere to mainstream standards, and seeking to convert other staff to their point of view. Some of these staff felt that the ‘badge’ of doing FS was more important than the pedagogical vision underpinning their schools’ involvement. Some

experienced a sense of professional isolation as they felt school management did not understand the FS ethos and therefore did not appreciate what staff were seeking to do. Thus, FS has the potential to disrupt and innovate from within our schools (Harris, 2018; McCree, 2019; Pimlott-Wilson & Coates, 2019).

While it is a challenge to ensure the integrity of FS in such a context, it can be *'just as fruitful'* (McCree, 2019, p. 12). FS is about promoting values of care both towards the natural world and towards the learner, which for McCree (2019) is true to learner-centred pedagogy. If aims are clear and a vision is articulated, then there is space for multiple perspectives to work in parallel (Kemp, 2020; McCree, 2019; Pimlott-Wilson & Coates, 2019). Harris (2018) suggests that looking at FS pedagogy in a binary way (indoors or outdoors, teacher-led or child-led, outcomes or process) is part of the problem. Kemp (2020) too suggests we should expect variety and distinctiveness in how schools enact FS as school contexts differ. Otherwise, we are limiting opportunities for schools to experience the potential of FS.

The place occupied by FS within the current structures represents an ethical position associated with our beliefs about the purpose of education. The absence of a commitment to a 'resistance' type of FS practice may mean that FS pedagogy is not seamlessly intertwined across all the learning of the school. However, if we want to include FS pedagogy as part of mainstream settings, then ways to ensure that this can happen must be found. Otherwise, FS pedagogy will forever be associated with niche activity. As McCree (2014) pointed out, FS must be accessible, not just to those with a fully formed eco-social identity, but (and maybe more importantly) to those who are open to that possibility.

3.12 Commodification

Some have argued that the formalisation of FS, through the adoption of a set of principles, has led to the 'commodification' (Leather, 2018) of FS as a 'drag and drop approach' (Lloyd, Troung & Gray, 2018), that does not acknowledge place, environment or culture. FS has been described as programmatic, *'a commercial commodity rather than an educational theory or pedagogy'* (Lloyd et al., 2018, p. 46). Prince (2019) says that it is not clear if the popularity of FS is due to a recognition of its integral value, or because it is funded by local authorities, or both. Alcock and Richie (2018) say that for Australian practitioners, travelling to the UK to study FS pedagogy is merely about coming back to *'perpetuate colonial legacies that can naively romanticise ideals around beauty in nature and wild places'* (p. 86). Commodification

is also associated with gaps in the underlying philosophical and pedagogical basis for FS (Waite, Bolling & Bentsen 2016; Leather, 2018). In turn, this undermines the importance of pedagogical principles in defining OE practice (Dillon, Morris, O'Donnell, Reid, Rickinson & Scott, 2005). Mycock (2020) describes FS as having '*no fixed definition*' and comprising a '*complicated, uneven and at times contradictory mix of pedagogical influences*' (p. 428).

While these concerns are ideological and pedagogical, more practical concerns to do with staffing, funding and curriculum overload have also led to many schools and providers offering what they call FS, but which do not meet the criteria for progressive nature-based pedagogy (McCree & Cree, 2017; Cree & Robb, 2021). Anecdotally in Ireland, there are many stories of FSLs being asked to take large groups, on their own, for shorter sessions, over fewer weeks, a scenario that does not support FS as a progressive pedagogy.

There are also legitimate concerns that Morgan (2018) raises to do with the level of pedagogical content knowledge (Shulman, 1987) about the natural world held by the adults leading the sessions. Morgan (2018) points out that the notion of 'forest' in FS ranges from substantive woodland to deforested corners. His concern is that as the FS movement matures, a deficit model of FS is becoming more prevalent. McCree (2019) also addresses the question of the care and attention needed to care for and manage the FS site, an aspect of FS practice that has not been researched to any great degree and is less well understood, particularly by FSLs who do not have an environmental background. Site management is challenging and time consuming and is often a task done in an unpaid or poorly paid capacity. Politically, this is a central issue in FS provision as the FS movement grows. Access to sites varies greatly and appropriate public provision is problematic and inequitable. Gill (2011) identified staffing and access to woodland as two key practical constraints on FS provision.

The overuse of standardised procedures and protocols during FS (Connolly & Haughton, 2017, p.120) can also impact on provision becoming overly programmatic and restricted. Regulation of risk potential through bureaucracy and lack of trust in professionals mean that judgement and common sense can take a back seat to regulation (Connolly & Haughton, 2017). Connolly and Haughton (2017) describe a tension between their participant's desire to allow children to assess potential risks (in line with the risk /benefit approach to practice that forms one of the guiding principles of FS) and the teachers' feelings of vulnerability should something go wrong. So, for example, they

described the children wearing high visibility vests as ‘*sending out the right message*’ (p. 118). Common-sense and instinctive processes were abandoned in favour of templates and formal recording procedures. Connolly and Haughton (2017) concluded that the benefits of exposing children to potential physical risk in FS was outweighed by the much higher levels of risk that these professionals ascribed to themselves should any harm come to the child. Yet, these adults were motivated to get involved in FS because children were being denied formative experiences in nature. This was associated with parental and school hypervigilance around being out of the classroom and the consequential narrowing of the focus of education.

These views of FS as programmatic and commodified have been contested in the literature. Knight (2018) points out that agreement on a set of principles does not contradict a ‘*freely chosen, participant-led approach*’ (p. 20). FS is characterised by a local cultural context, what Blackham et al., (2021) described as local micro-communities. Descriptions of settings in the literature suggest that the promotion of wellbeing, education, health and environmental connection outcomes within a place-based perspective, cognisant of indigenous heritage, is central to many FS practices.

Nevertheless, different understandings of FS pedagogy can impact on how children experience FS. MacKinder (2017) explored how these differing understandings influenced the opportunities available to children to exercise choice and autonomy in FS. The purpose of FS, regarding whether cognitive and/or affective objectives were prioritized differed among experienced OE teachers (Wilhelmsson, Ottander & Lindestav, 2012). These sorts of differences in approach underscore the need for training in FS pedagogy, as well as time for planning, review and reflection to be part of all FS practice. They also highlight the complexity of the pedagogical task in hand. The priority must always be to strive to uphold the guiding principles of FS pedagogy in practice. As Sharma-Brymer et al., (2018) say: ‘*FS practitioners will need to carefully consider the goals of the learning process, key affordances, form of life and individual effectivities based on the person-environment relationship in order to design effective learning experiences*’ (p.110), towards maximising wellbeing and flourishing.

3.13 Conclusion

This chapter has reviewed the literature on FS in order to inform the current study. As the foregoing discussion demonstrated, since its emergence in England in the mid 1990’s, the outcomes associated with contemporary FS were wide-ranging and almost wholly positive. There is universal and converging evidence in all of these

studies that FS contributes to wellbeing, nature connection, social and personal development and curriculum-based learning, to varying degrees. These outcomes were described across different age groups, both within mainstream and across specialist provision. These benefits extended to adult and teacher wellbeing in terms of job satisfaction, feelings of professional autonomy and enabling adults to reflect on their professional identity. Some key themes were identified in this body of literature that are relevant to the current study.

There is universal agreement that being with(in) nature provides something distinctive as a learning context. In the emergent phase of the contemporary FS movement social and emotional outcomes were more likely to be prioritised and the place of nature connection (and indeed cognitive development) in FS pedagogy not clearly articulated. Until very recently, the idea of nature as agentic was not considered in the FS literature and consideration of the role of indigenous knowledge in FS practice and pedagogy minimal.

Adults who participate in FS differ in their level of comfort with practicing FS as a playful, learner-centred, nature-based pedagogy, even within individual settings and schools. Differences were evident in how the adults who provided and led the FS sessions understood play, risk and safety, nature connection and learner-centred pedagogy. These differences affect the type of learning opportunities available in the FS setting. Holding a democratic, relational view of the adult /child/nature relationship in schools (or not) influences how we approach FS pedagogy. A key recurrent finding in the literature is that the opportunity to participate in FS helps to break down resistance to progressive OE. This is associated with the opportunities presented in FS to explore one's professional identity through collaborative practice and to 'teach' with(in) local nature. Individual teachers and individual schools *can* disrupt the status quo by introducing FS pedagogy.

The importance of a shared understanding of what the aims of participation in FS are in different settings and how that will be achieved are underlined in this review. The literature suggests that the purpose of FS is often unclear and not explicitly articulated. Whether FS is used for instrumental reasons (i.e., improved physical activity or respite) or whether it is viewed as a more transformative type of experience aligned with educational purpose should be articulated in each setting. There is no 'right' place in terms of the level of understanding that is required; however, being clear about where you are aiming to go with FS pedagogy is essential. Otherwise, it becomes potentially

programmatic, commodified and its impact is limited. This is particularly important given that FS practice is constrained by the weight of the prevailing mainstream school system. Those who challenge the system must be prepared to stand over their choices. While this can be stressful and difficult, it can ultimately be fruitful.

The theoretical underpinnings of FS pedagogy, while perhaps not clearly or fully articulated, were based on substantive frameworks. Given that many of the studies were small scale, practitioner-led and of an action research orientation, theoretical understandings were perhaps less important than recognising the visible changes in practice locally within settings. A more explicit articulation of the theoretical basis for FS as a pedagogical approach is required going forward. This will help to connect the guiding principles of FS pedagogy in its enactment with their theoretical roots. Without this expressed theoretical base, the risks to FS as progressive nature-based pedagogy within the hegemony of performativity is underlined. As FS emerges in Ireland, the extent to which the points raised in this review are relevant to emerging practice in the Irish primary school context is important. This will be explored in the present study.

Chapter 4: Methodology

'The point for me is how to unveil the practice in order to get into the hands of the unknown theory, the not-yet-perceived theory, and how to discover in the practice the not-yet-knowledge, which is a theoretical task' (Freire, 1995, cited in Torres, 2014, p. 84).

4.1 Introduction

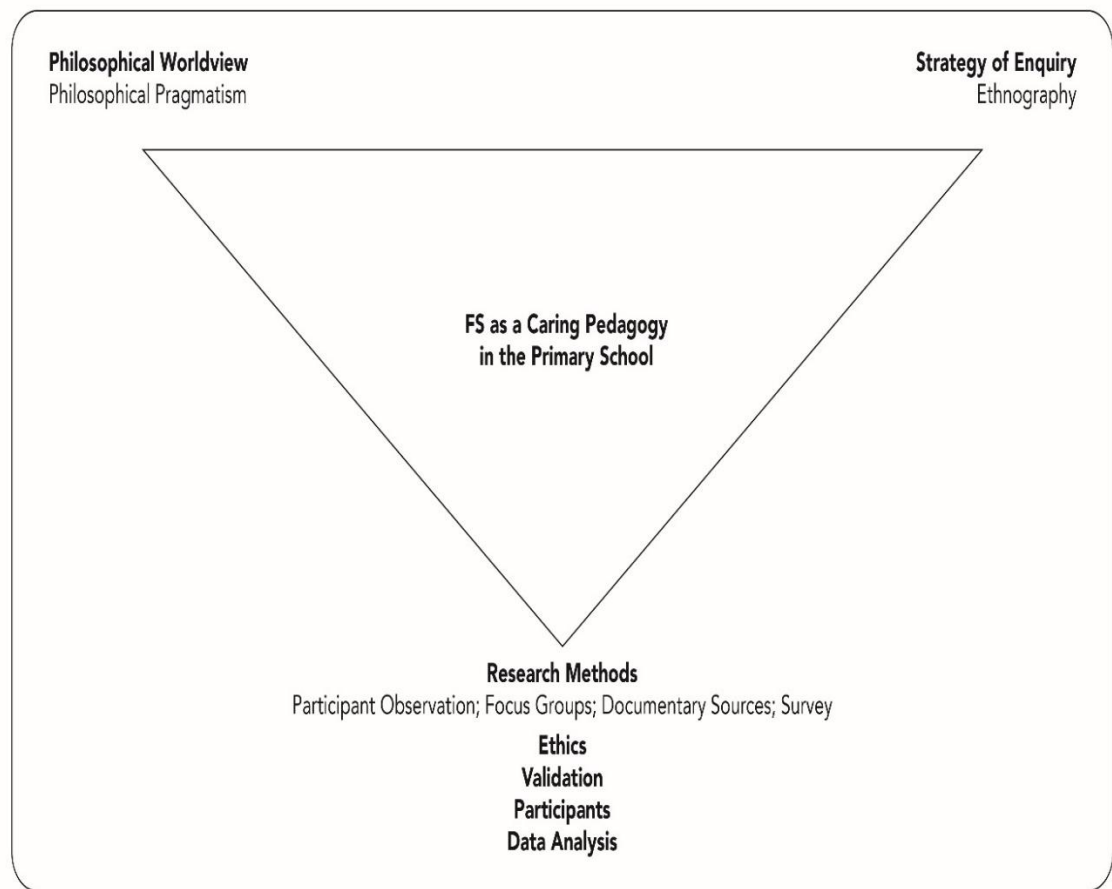
This chapter sets out the methodology used in this research study. The chapter begins by setting out an account of the research design under three main headings: the philosophical worldview underpinning the research study; the strategy of enquiry and the research methods. The different procedures used to carry out the study are then described. The ethical and the validation procedures are set out. This is followed by an account of the methods used to select the participants and the procedures and methods for data collection. The next section describes the pilot phase of the study. The data analysis procedures are then described, followed by an account of the approach to the writing up of the study. Detailed appendices accompany this chapter to provide the reader with sufficient detail. A full summary of the study is provided in chapter one.

4.2 The Research Design

According to Creswell (2009), research design comprises a coherent interconnection of three elements. These are an account of the philosophical worldview of the researcher, the strategy of inquiry (or the methodology) and the research methods and procedures used to carry out the study. Together, these elements enable a considered and complete response to a research question. See Figure 6, The Research Design Framework. Decisions on each of these three elements are influenced by the nature of the research problem and the lens through which it is being examined. Using this framework to design the current study ensured that the proposed research design comprised a coherent, integrated and rigorous process of enquiry. It is respectful of the integrity of the social research process and of those who participated in the study. Each of these aspects of the research design for this study will now be discussed in turn.

Figure 6

The Research Design Framework



Note. Adapted from Creswell (2009).

4.2.1 Philosophical Worldview

Philosophical worldviews (Creswell, 2009) variously described as research paradigms (Kuhn, 1970) or philosophical assumptions (Crotty, 2003) have an influence on the methodological choices made in any research study. A worldview includes beliefs about ontology (the nature of reality), epistemology (how we gain knowledge about the world), axiology (values) and methodology (strategy or plan of action). Acknowledging these assumptions explicitly, and their impact on the decisions made, is part of establishing the integrity of a study. As Morgan (2014) puts it: *‘We are not free to believe anything we want about the world if we care about the consequences of acting on those beliefs’* (p. 1048). The first question for the researcher then is to ask of themselves what difference it makes to *‘do our research one way or the other?’* (Morgan, 2014, p.1046).

I believe that school communities need to be aligned with the world of the children in that community. I started teaching in a working-class area of traditionally high employment, which was deeply impacted by unemployment, addiction and poverty in the 1980s. I learned about how communities challenged schools to be more responsive. In many cases, despite a deep commitment to change by individual teachers and individual schools, the institutional response was, and remains, inadequate. Moving into the role of school leader in 1993, I became involved with a school community which sought to establish a school that was democratic, child-centred, multi-denominational and co-educational. There, too, the voices of those who sought change and transformation were (mostly) impeded by a more conservative and compliant institutional voice. It often felt that the knowledge that communities have about their own needs was set aside.

So, when I tried to answer Morgan's question, regarding what difference it makes to do my research one way or the other, I wanted this research to be true to this worldview. In this study, I wanted to voice the experiences and understandings of those active in the emergent FS movement in Ireland and to explore if, and by what means, FS can contribute to making relational caring more fundamental to pedagogical practice in our schools. Philosophical pragmatism (Morgan, 2007; 2014) best describes such a world view and is the paradigm that underpins this research study.

4.2.2 Philosophical Pragmatism

For Morgan, a pragmatic approach helps to foreground personal values and politics as part of '*who we are and how we act...these aspects of our world view are at least as important as our beliefs about metaphysical issues*' (2007, p. 70). Philosophical pragmatism is rooted in the question of the nature of human experience. There is explicit acknowledgement that research is influenced by the researchers' values and politics. Relationships in research are determined by the researcher, a position which places great power in the hands of the researcher. With that power comes the responsibility to be ethical and trustworthy in their approach to the research. Methods are chosen eclectically, specific to the purpose of the research. Mertens (2015) describes the beliefs associated with philosophical pragmatism under four headings: Axiology, Ontology, Epistemology and Methodology. See Figure 7.

Figure 7

Beliefs Associated with Philosophical Pragmatism.

Axiology (nature of ethical behaviour)

Knowledge in pursuit of desired ends is influenced by the researchers' values and politics

Ontology (nature of reality)

There is a single reality. All individuals have their own unique interpretation of that reality

Epistemology (nature of knowledge)

Relationships in research are determined by the researcher

Methodology (approach to systematic enquiry)

Match methods to specific purposes of research

Note. Adapted from Mertens (2015), p. 11.

The pragmatic approach sits in contrast to the so-called 'incommensurability' of paradigms (Kuhn, 1970), the idea that certain strategies of enquiry are aligned with certain worldviews. Pragmatism draws from Greene (2007) on mental models as a way to: *'broaden the rarefied abstract notion of philosophical paradigm to reflect the more grounded, intuitive, dialogic notion of a mental model as the underlying framework...for social research'* (p. 53). A mental model, says Greene, is inclusive of the researchers' own predispositions and experiential wisdom, as well as their philosophical assumptions about the nature of the world, their knowledge about that world and the methods to meaningfully represent that knowledge. She describes such mental models as *'inherently dialogic, as most social inquirers seek connection, conversation, understanding – one with the other'* (p. 53).

This perspective sits well with the aim of this ethnographic enquiry. The pragmatic paradigm enabled me as a researcher to prioritise an appropriate and comprehensive response to the research questions over paradigmatic considerations. The strategy of enquiry (methodology) is the focal point, drawing from the abstraction of epistemology and the technicality of methods. Thus, issues relevant to the research question are the principal 'line of action' (Morgan, 2007, p. 69). Philosophical

pragmatism is an eclectic paradigm that acknowledges the complexity of the social world and its multiple and valid ways of knowing. Thus, I could respond to the research questions using a mixed methodology, for example. It provided a framework for successfully integrating both qualitative and quantitative methods of enquiry.

Philosophical pragmatism considers research as being about the nature of human experience. As the researcher, I must explicitly set out my values and how they both influenced, and were influenced by, the research process, a perspective that sat well with me. Philosophical pragmatism enables a deeper engagement with diverse and different ways of knowing, and being, which is ultimately the objective of this study.

4.2.3 Strategy of Enquiry - Ethnography

The second element of research design is the strategy of enquiry. Figure 8 describes the social research process of an ethnographic study.

Figure 8

The Social Research Process in Ethnography

The Research Question

Treats the formulation of the research questions and their refinement as taking place over the whole course of the research process

The Research Design

A flexible approach to research planning is adopted, not just to deal with obstacles but to take opportunities

The Case

In-depth investigation of a small number of naturally occurring cases

The Data

- Observation by researcher
- Elicited information from others accounts
- Extant information

The Analysis

Mainly Qualitative

The Write Up

A flexible approach adapted to the research findings and to the intended audience

Note. Adapted from Hammersley (2018), p. 11.

Creswell (2009) describes strategies of inquiry, (or methodologies) as the types of designs chosen to guide the study. These may be qualitative, quantitative or mixed

approaches, each of which are associated with particular methodological orientations. In this study, an ethnographic methodology is the strategy of enquiry that best responds to the research question in line with my philosophical stance as previously described.

Situated in the interpretive (qualitative) space, ethnography is a strategy of inquiry in which the researcher studies a group in a natural setting over a prolonged period of time by collecting, primarily, observational and interview data (Creswell, 2007).

Hammersley & Atkinson (2019) define ethnography as the *'integration of first-hand empirical investigation with the comparative or theoretical interpretation of social organisation and culture'* (p.1). In this view the participants account is accepted for what it tells us about the phenomenon in question and there are no grounds *'to deny the validity of accounts on the grounds that they are subjective'* (Hammersley & Atkinson, 2019, p.103). The thick description associated with ethnography is a way to present the informant story, but also to enable the search for deeper meaning and analytic structure in the data (van Manen, 2016). Subsequent attempts to explain or theorise are based on the idea that the ethnographer can capture these processes of social life and its complexities. Humberstone & Stan (2011) writing in the context of a study on OE note that *'ethnographic research is not aligned with performativity but rather is concerned with the authenticity of the teaching and learning situation'* (p.185). Van Manen (2016) says a 'good' ethnography describes a cultural reality in such a way that a non-member of the culture would *'pass as an insider'* (p.178, his emphasis) if he or she had internalised the cultural features of a particular setting as described in the ethnography.

4.2.4 Research Methods

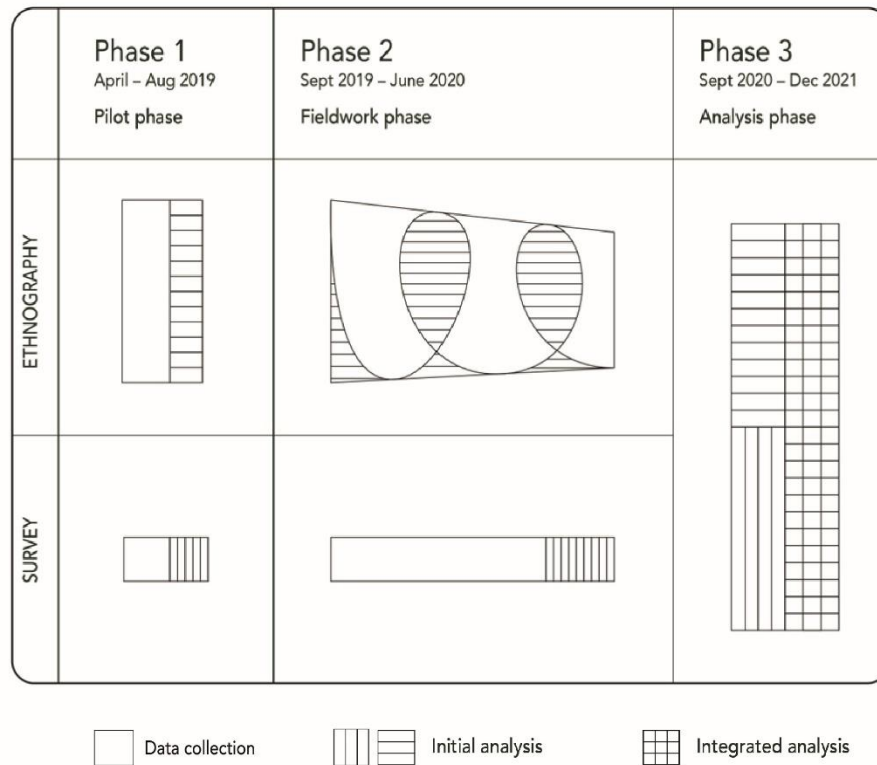
The third element in research design is the choice of research methods and procedures regarding data collection, data analysis and validation (Creswell, 2009). In ethnography, a core assumption is that through direct observation by a researcher (participant observation) we are able to *'learn'* (Hammersley & Atkinson, 2019, p. 9) the culture in question. However, the ethnographer is also concerned with an analytic understanding of perspectives, a duality that may cause tension (Hammersley, 2006). In this study, naturalistic fieldnotes, focus groups, documentary data and a national survey were used to collect data. This eclectic choice of methods reflects Hammersley (2018) who suggests that the ontological and epistemological arguments underpinning an ethnographic orientation should be used instrumentally; in other words, *'how productive they are in generating worthwhile and reliable knowledge'* (p. 10). In this study, for

example, a national survey was used to enable the ethnography to be contextualised within the understanding of the wider Irish FS community.

However, in order that the inclusion of a national survey is responsive to the ethnographic strategy of enquiry, certain parameters must be observed in how the survey is used. Pole & Morrison (2003) distinguish between ethnography as ‘process’ and ethnography as ‘product’. Ethnography as process may make use of different methods, as long as they are *‘utilised within the context of the specific methodological and epistemological tenets of ethnography as product’* (p. 8). The key is ensuring that the philosophical principle of ethnography, associated with a *‘privileging of a detailed insider’s view over that of an outsider’* and a *‘concern for the significance and meaning of social action for the actors upon whom the research is focussed’* (p. 8) is maintained. Ethnographic methods *per se* do not exist: *‘Methods become ethnographic when they are used in a particular context and when the data that they yield are analysed in ways which are commonly seen to lend themselves to an ethnographic approach’* (Pole & Morrison, (2003, p. 54). This is the context in which the national survey is used in this study. Situating the ‘story’ of FS in Bay School within the understanding of the wider Irish FS community will help to inform FS practice more generally, an important aspect of ethnographic study (Wolcott, 1994). Hammersley & Atkinson (2019) say: *‘We develop analyses by making connections among the conceptual categories that seem to make sense of our local data, but also by relating them explicitly to generic ideas that transcend the particular, but that may illuminate them’* (p.185). The Research Design is summarised in Figure 9.

Figure 9

The Research Design



Data collection for the ethnography in Bay School and the national survey was carried out contemporaneously. Phase one, the pilot phase took place during the period April to August 2019. In Bay School, this consisted of a series of 12 FS sessions over six weeks in May/June 2019. The pilot phase of the national survey comprised the design phase and the piloting of the draft survey between April and August 2019. The ethnography and the survey were analysed separately during this phase. Phase two, the fieldwork phase comprised the main study. Data collection for the main study was carried out during the period September 2019 to June 2020. Analysis of the ethnography and the survey during this phase were also carried out independently. The funnel image is used in order to make explicit the ongoing nature of analysis during ethnography, as the researcher becomes more experienced in the field through gathering data over an extended period. Phase three describes the formal analysis phase and illustrates how the different sources of data were integrated in the final stage of the study.

This is an exploratory study that will establish a foundational understanding of FS in the Irish context. As an emerging pedagogy, making FS accessible through

presenting the different voices, using both words and numbers, based on multiple sources, will help to provide a deeper understanding of the potential of FS as a relational, caring pedagogy in our schools. There are challenges in managing the integration of different underlying epistemological approaches associated with qualitative and quantitative data in one study (Creswell & Plano-Clark, 2011), which are further discussed in later sections.

4.3 Ethics

Full ethical approval was granted from DCU for this study. See Appendix A. Key issues are highlighted in the following sections, regarding informed consent, vulnerable participants, confidentiality and data storage.

4.3.1 Informed Consent and Assent

A clear statement regarding the freedom of all the participants to decline the invitation to participate or to withdraw from the study at any stage was communicated both verbally and in all the written consent and assent forms. See Appendix B, Letter to Chairperson of Board of Management; Appendix C, Invitation to Principal, Staff and Parents; Appendix D, Invitation to IFSA and FS Training Organisations and Appendix E, Children's Assent Form.

As these appendices demonstrate, it was highlighted to participants that they must feel free to express their opinions as fully as possible, in order that the research is ethical and useful to others. Participants were advised in writing that the role of the researcher in IFSA, and as a former principal of Bay School, should not affect their decision to participate, or not. Every effort was made to ensure that all communication, both written and oral, was developmentally appropriate and that the children, in particular, understood their rights as participants in the research process before they assented to take part. A member (not the researcher) of the Executive of the IFSA was designated to deal with any issues arising from the participation of IFSA in this study. The researcher absented herself from any discussion within IFSA regarding participation in the study.

4.3.2 Vulnerability of participants

By virtue of their age (five to ten years) the children participating in the study are considered vulnerable. The study is associated with the normal work of the school, during regular school activities, in the regular FS and classroom settings. No sensitive questions were asked. While the potential risk is regarded as minimal, there is the possibility that a child (or an adult) may feel anxious about their views being recorded

or their actions being observed by the researcher. In order to ensure the risk is minimised, participants were reminded that their participation was voluntary, that they were free to decline to participate at any time, without giving a reason, to ask that they were not observed and that their own work or notes be excluded from the study. See Appendix E, Children's Assent Form. The Children First Guidelines regarding child safeguarding were followed (Department of Children & Youth Affairs, 2017).

4.3.3 Anonymity

Individual adults, children and class groups were identified by pseudonym. While Bay School is a pseudonym, as it was the Irish first primary school to introduce FS, and as that information is already in the public domain, permission was sought (and given by the Board of Management) to name the school in the study. I decided not to use the real name of the school in order to minimise the potential identification of individual participants. The impact of any potential loss of anonymity for participants needs to be balanced, firstly with the importance of documenting the experience of these early adopters regarding FS pedagogy and secondly, with the potential contribution the participants are making to knowledge creation by their involvement in this study. All written documentation was assigned a code number or letter or pseudonym, as appropriate. Pseudonyms were used throughout when referring to individuals, class groups, places, excerpts from focus groups or any individual transcripts. Images did not include participants' faces in order to preserve anonymity. IFSA, the two FS training organisations and their key personnel are identified as these are matters of public record and already in the public domain.

4.3.4 Data Storage

Hard copies of focus group transcripts and other data collection instruments were initially stored in a locked file cabinet in a secure office on DCU St Patrick's campus. Following the closure of the campus during the Covid-19 emergency, all data files were kept in a secure cupboard in my home study. All identifying data had been removed from this data and replaced with codes. Computer files are password protected in an encrypted laptop in my DCU account. The dataset will be destroyed five years after the submission of the PhD thesis. This timeframe will maximise the learning from the research data set. All paper copies of personal data will be shredded and disposed of in a confidential bin by me five years following the submission of the PhD thesis. All electronic copies of personal data will be deleted by me five years following the submission of the PhD thesis.

4.4 Validation Strategies

This is an appropriate point to discuss the validation measures taken to ensure the trustworthiness of the processes used in this study. Different terms are used to assess the quality of a research design. Reliability and validity are associated with the quantitative tradition; trustworthiness, credibility, rigour, and authenticity with the qualitative tradition and more recently ‘legitimation’ is a term associated with validation in mixed-methods studies (Plano Clark & Ivankova, 2016). Creswell (2009) uses the terms validation to describe these processes and it is the term adopted in this study. The purpose of validation is twofold: to help the researcher to assess the accuracy of the findings and to assure readers of that accuracy. In this study, validation was managed using multiple strategies (Bazeley, 2013; Creswell, 2009; Ravitch & Karl, 2016; Wolcott, 1994).

Reliability refers to the extent to which studies can be replicated. It is potentially more problematic in ethnography than in other methodological approaches. LeCompte and Goetz (1982) note that: ‘*The analytic processes from which ethnographies are constructed often are vague, intuitive and personalistic*’ (p. 40). LeCompte and Goetz (1982) suggest that in contrast to the issues around reliability associated with ethnographic research, ‘*validity may be its major strength*’ (p. 43) given the lengthy period researchers spend with the studied group. While Wolcott (1994) rejects validity as a construct in ethnography, he sets out a number of steps to achieve quality in ethnographic study. These include a listening stance, accurate recording, writing early, rich description and full and candid reports. He regards reflexivity as a strength of qualitative study. He advocates seeking feedback from participants. He highlights the importance of attention to achieving balance, coherence and accuracy in the writing process, which he describes as a kind of ‘internal’ validity, or reliability.

The data analysis phase of any research is a particularly important time for attending to the validation process. Bazeley (2013) says the emphasis should be on being consistent and thorough and advises maintaining a clear record of coding decisions to demonstrate the data analysis process. The coding categories should make sense to a reader in the context of the aim of the study, and enable the reader to make a judgement based on ‘*the strength of your argument and the clarity and comprehensiveness of your evidence*’ (Bazeley, 2013, p. 151). An ethnography must also make sense to those who provided the data. Pole and Morrison (2003) suggest that conclusions which show ‘*clear connective links to the educational worlds in which the*

research operated' (p. 109/110) are essential for authoritative and authentic representation of the cultural world under scrutiny. The voices of the multiple participants, with their '*own purposes, perspectives, experiences and knowledge*' must be represented in the categories developed from the data (Bazeley, 2013, p.150).

These processes were managed in this study in a number of ways. Firstly, there was an implicit rigour associated with the integrated design process described in the previous paragraphs and the high level of detail provided about the procedures and processes used to manage and analyse the dataset (LeCompte & Goetz, 1982). Secondly, there were a number of explicit steps taken to validate the study which are described in the following sections.

4.4.1 Researcher Positionality

My own ongoing activism in the Irish FS movement and my background as a teacher, school leader and educational psychologist clearly impact on my approach to the study. This research was guided by the principle that the '*core ingredient is not insider or outsider status but an ability to be open, authentic, honest, deeply interested in the experience of one's research participants, and committed to accurately and adequately representing their experience*' (Corbin Dwyer & Buckle, 2009, p. 59). My positionality is discussed throughout the study. Keeping a reflective journal provided a way for me to write down and think purposefully about this issue throughout the study.

4.4.2 Rich Description

A high level of detail regarding the processes used to collect and to analyse the data is provided in this chapter. Extensive appendices are provided to ensure the reader can trace the process of analysis. I used a recognised framework for thematic analysis (Miles, Huberman & Saldana, 2014; Saldana, 2016) to ensure constancy and traceability in the qualitative coding process. While an inductive approach to coding was used in order to capture the participants' perspectives as widely as possible, the coding categories were also guided by the research questions, the conceptual framework and the literature review (described in chapters two and three). I aimed to use low inference field notes and descriptors (Emerson, Fretz & Shaw, 2011) in the field. Recording devices and software helped to manage the organisation of the data and to provide an 'audit trail'. In the quantitative data set, I adhered to the statistical rules regarding the conditions under which different statistical tests are appropriate to use, including the use of well-regarded reliability coefficients, appropriate sample size and recognised reporting rules.

4.4.3 Triangulation

The design allowed for divergent as well as convergent findings to be considered and so supported triangulation of the various data sources. For example, field notes provided concrete examples of some of the experiences that were described by the staff and children in the focus groups. The focus groups and review meetings enabled in depth discussion of points made in the one-page surveys, for example.

Both descriptive and multivariate statistical analysis were used to explore the quantitative data. The different methods of data collected (field notes; focus group discussions; documentary sources and survey data) were equally valued in the analysis, unless stated otherwise. The voices of the different groups of participants (staff, children, parents, survey respondents and the researcher) are preserved in the findings chapters and integrated in chapter eight.

Clarity regarding the points of interface of the different sources of data (Guest, 2013) is provided. **Merging** is demonstrated where qualitative data was quantised by assigning numerical values; for example, using numerical values to report the frequency of occurrence of qualitative survey responses and vice versa; quantitative data was also used descriptively to explore the response patterns. **Connection** is demonstrated in comparing and contrasting qualitative and quantitative results in their different forms, for example, and in the inclusion of different response types in the survey. **Integration** is demonstrated in the interpretation presented in chapter eight to describe the lifeworld of FS for the participants. The multiple strands of the research were integrated in chapter eight to provide a full and coherent picture of the lived experience of FS in Bay school, illuminated by the wider community of FS in Ireland.

4.4.4 Participant Validation

Initial drafts of chapter five and chapter six were shared with the principal (Clare) and the FSL (Laura) in Bay School¹⁸. Clare indicated that the chapters were ‘*balanced and fair*’ and Laura felt that both chapters captured ‘*everyone’s perspective about FS*’. A summary of their comments is provided in Appendix F, Participant Validation Summary.

¹⁸ All names of individuals and class groups are pseudonyms

4.4.5 Reflective diary

Throughout the research process I used a reflective diary to record my reflections ‘in the field’. It provided an untidy but nevertheless critical component of the study. It comprised seven notebooks, multiple scribbled bits of paper taped into copybooks and notes to self, scribbled on books, typed into my writing, highlighted in yellow and often difficult to find. The act of writing down my thoughts helped me to process and make sense of my data. I began the formal reflective diary on 1st April 2019 as I prepared for the pilot phase of the study and it remained ongoing throughout.

4.5 Participants and Data Collection

4.5.1 Participants: Bay School

Bay School was invited to participate in this study as it was the first Irish primary school to introduce FS as a pedagogical approach. The unit of analysis was the series of 22 FS sessions in Bay School during the 2019/20 school year¹⁹. Each session lasted approximately four hours, beginning as the children arrived in the school on FS days and finishing when they returned to their classroom. This purposive sample (Robson & McCartan, 2016) was chosen for its unique features. Bay School was the first Irish primary school to introduce FS in 2012 and FS remains (in 2022) embedded in the pedagogical repertoire of the school. While the insights to be gained from a study of FS in such a setting may differ from the experience of other settings, in the context of the exploratory nature of the study, Bay School is well chosen. There is a deep well of FS practice in Bay School which is important to explore as the emergent FS movement in Ireland grows. There was also a secondary convenience aspect to this choice. Bay School is situated close to my home and as a former principal, I was more likely to gain access to the setting.

I wrote to the chairperson of the Board of Management of Bay School by email to invite the school to participate in the study. See Appendix B. The email contained an information sheet about the research and an external approval consent form. Following the granting of consent by the Board of Management, an information sheet about the research and a consent form was sent by email to the principal. She forwarded it to the

¹⁹ The closure of schools due to Covid-19 in mid-March 2020 limited data collection to 22 sessions out of an anticipated 30 sessions. Sixteen sessions took place as planned with the ‘Robins’ class and six sessions (out of a planned 14 sessions) with the ‘Owls’ class.

relevant staff, parents and children. See Appendix C. Children whose parents consented to their participation were then asked to give their assent to participation. At this point, I visited the three class groups (Acorns, Robins and Owls) to introduce myself and explain the study in person to the children. The assent forms were completed in the classroom by the children and returned to me via their teachers. See Appendix E. All of the staff and parents gave their consent. A small number of the children (n=4) did not assent.

4.5.2 Participants: Children

Two classes, Robins (n=30; aged 9/10 years) and Owls (n=30; aged 7/8 years) participated in FS during the period of the study. The Robins previously completed eight sessions in spring 2019 when they were in second class (aged 7/8 years) and six sessions in the summer term of 2017 in senior infants' class (aged 5/6 years). The Owls class previously completed six sessions of FS in senior infants' class (aged 5/6 years) in the summer term of 2018. In Bay School, each class group is split into two smaller groups for FS, in keeping with the high adult to child ratios practiced in FS. Each of the FS groups in the study comprised 15 children. A third class, the Acorns (n=30; aged 5/6 years) participated in the pilot phase of the study.

4.5.3 Participants: Staff

Three staff normally participate in each FS session in Bay School: the FSL, a teacher and an assistant²⁰. Table 1 describes the sessions and the staff included in the study. The FSL, Laura, is employed by Bay School two mornings a week to facilitate the FS sessions. She also manages the School Age Childcare Service in the school and is known by sight to most of the staff and children. Laura led 19 of the FS sessions. A teacher (John), who was not a trained FSL, led the sessions on two occasions and on the third occasion, the session was led by another teacher, Joyce, who was at the time training as a FSL²¹. The first session took place on 1st October 2019 and the final session took place on 11th March 2020. Two staff participated in the pilot phase of the study, described in section 4.8 of this chapter.

²⁰ The 'assistant' staff members were not included in the study as they did not usually attend the review meetings and the personnel varied from session to session.

²¹ This teacher covered the absence of Laura. She did not otherwise participate in the FS sessions during the study.

Table 1*FS Sessions and Staff*

Session 8.30am – 12.20pm	Staffing		Total ²²
	FSL	Teacher	
Robins Wk 1 Tues	Laura	Ann	3
Robins Wk 1 Wed	Laura	John	3
Robins Wk 2 Tues	Laura	Ann	3
Robins Wk 2 Wed	Laura	John	3
Robins Wk 3 Tues	Laura	Ann	3
Robins Wk 3 Wed	-	John	2
Robins Wk 4 Tues	Laura	Ann	3
Robins Wk 4 Wed	Laura	Kate	3
Robins Wk 5 Tues	-	John	2
Robins Wk 5 Wed	Joyce	-	2
Robins Wk 6 Tues	Laura	John	3
Robins Wk 6 Wed	Laura	Kate	3
Robins Wk 7 Tues	Laura	John	3
Robins Wk 7 Wed	Laura	Kate	3
Robins Wk 8 Tues	Laura	John	3
Robins Wk 8 Wed	Laura	Kate	3
Owls Wk 1 Tues	Laura	Mary	3
Owls Wk1 Wed	Laura	Eva	3
Owls Wk 2 Tues	Laura	Mary	3
Owls Wk 2 Wed	Laura	Eva	3
Owls Wk 3 Tues	Laura	Mary	3
Owls Wk 3 Wed	Laura	Eva	3

Five different teachers (Ann, John, Kate, Mary and Eva) participated in the FS sessions. All had previous experience in FS. The Robins class teacher, Jean, who (as class teacher) would usually participate in the sessions did not take part this year as she was going on maternity leave. Instead, three different teachers (John, Ann and Kate)

²² This total includes the ‘assistant’ staff member who participated in the FS sessions. This adult was not a participant in the study. I included them in the total number of adults present for the purposes of accuracy.

participated in FS with the Robins class. For the Owls class, their class teacher (Mary) and special education teacher (Eva) participated in the sessions.

4.6 Data Collection in Bay School

4.6.1 Participant Observation

Participant observation is the collection of data using naturalistic fieldnotes by the researcher, acting with the knowledge of the participants. I wore a small portable microphone (Rode SmartLav+ Lavalier Microphone for Smartphones) attached to my phone (Samsung Galaxy A50) so that I could record my fieldnotes by speaking discreetly into the microphone. I also used A4 sheets attached to a clipboard to write fieldnotes. I used a Canon Powershot A3500 IS camera to take images throughout the sessions. I focussed on the FSL as an ‘anchor’ for my fieldnotes. My aim was to record the social action (Wolcott, 1994) through detailed descriptions of the events, the interactions and the temporal routines I observed.

4.6.2 Staff Planning Focus Groups

Two one-hour focus groups (specific to the research study) were held prior to the start of FS, one for the Robins FS staff and one for the Owls FS staff. Time was set aside during the usual FS staff planning meeting, during the regular school day, for this purpose. The focus group took place in a meeting room in the school. The Robins FS staff planning focus group was attended by five members of the staff: Laura (FSL), John (teacher), Ann (teacher), Jean (teacher) and Clare (principal). The Owls FS staff planning focus group was attended by Clare (principal) and Eva (teacher)²³. The purpose of the staff planning focus group was to enable the FS team to share their understanding of FS as a pedagogical approach. An informal semi-structured format was used and is described in Appendix G, Staff Planning Focus Group Schedule. Both planning focus groups were recorded on my phone and subsequently transcribed by me.

4.6.3 Staff Look-back Focus Groups

Two one-hour, ‘look-back’ focus groups (specific to the study) were held following the series of FS sessions, one for the Robins FS staff and one for the Owls FS staff. The Robins FS staff look-back focus group was attended by Laura (FSL) and Kate (teacher). Clare (principal) attended for a short time. This took place during the school day in a meeting room in the school. The Owls FS staff look-back focus group

²³ At short notice, on the morning of the meeting, the two other FS team members were unable to attend.

took place online due to Covid-19 school closures. This was attended by all four of the Owls FS staff: Mary (teacher), Eva (teacher), Clare (principal) and Laura (FSL). The purpose of the look-back focus group was to ‘look-back’ to see if the FS process unfolded as expected and reflect on the sessions in order to feed in to future planning. An informal semi-structured format was used and is described in Appendix H. Both ‘look-back’ focus groups were recorded on my phone and subsequently transcribed by me.

4.6.4 Staff Session Review Meetings

Following each FS session, there was a ten minute review meeting, part of the usual work of the school. This took place in the school, in the room where the children gathered for FS, following each session in the forest, after the children had returned to the classroom.

The following prompts were used to guide the review session: Context, Routines and Activities, Success, Golden Moments, Integration and Planning. See Appendix I. These were based on the staff individual session review sheet (see section 4.6.5). An informal conversational format was used. All the review meetings were recorded on my phone and subsequently transcribed by me. I also took handwritten notes. The first review meeting took place on 1st October 2019 and the final meeting on 11th March 2020. These review meetings were usually attended by the FSL (Laura), the teaching staff member who participated in the FS session that day. If the class teacher had not been in FS that day, they too were invited to this meeting. Meetings took place for 21 out of 22 sessions. I attended all 21 meetings. The numbers attending these sessions varied. The class teacher attended 8 out of 22 sessions. Table 2 sets out the attendance at these session review meetings.

Table 2*Attendees at the Staff Session Review Meetings*

Session	FSL	Teacher	Class Teacher
Robins Wk 1 Tues	Laura	Ann	Jean
Robins Wk 1 Wed	Laura	John	-
Robins Wk 2 Tues	Laura	Ann	-
Robins Wk 2 Wed	Laura	John	-
Robins Wk 3 Tues	Laura	Ann	Jean
Robins Wk 3 Wed	-	John	-
Robins Wk 4 Tues	Laura	Ann	-
Robins Wk 4 Wed	Laura	Kate	Jean
Robins Wk 5 Tues	-	John	Sally
Robins Wk 5 Wed		NO REVIEW	
Robins Wk 6 Tues	Laura	John	Sally
Robins Wk 6 Wed	Laura	Kate	-
Robins Wk 7 Tues	Laura	John	-
Robins Wk 7 Wed	Laura	Kate	-
Robins Wk 8 Tues	Laura	John	-
Robins Wk 8 Wed	Laura	Kate	-
Owls Wk 1 Tues	Laura	Mary	-
Owls Wk 1 Wed	Laura	Eva	(Eva)*
Owls Wk 2 Tues	Laura	Mary	-
Owls Wk 2 Wed	Laura	Eva	(Eva)*
Owls Wk 3 Tues	Laura	Mary	-
Owls Wk 3 Wed	Laura	Eva	(Eva)*

Note *Eva was the class teacher.

4.6.5 Staff Individual Session Review Sheet

Each teacher who participated in the FS session on any particular day completed an Individual FS Review Sheet, part of the usual work of the school. See Appendix J. During the period of this study, 18 out of 22 forms were completed by the teaching staff who participated in the sessions as follows: John (6), Ann (4) Kate (4) Mary (3) Eva (1). Following each review session, I photocopied and anonymised the completed sheets from each staff member and returned the originals to the FSL.

4.6.6 FS Staff Review and Reflection (End of Sessions).

This comprises a one-page review and reflection sheet, part of the usual work of the school. See Appendix K. In the Robins class, two forms were returned in hard copy to me by Laura and Kate. In the Owls group, all four members of the FS staff (Mary, Eva, Laura and Clare) completed this sheet, which was sent to me via email by the individual staff. I photocopied and anonymised the hard copies and returned the originals to the FSL.

4.6.7 FS Children's Focus Groups

Two forty-five-minute focus groups, specific to the study, were organised with eight children from the Robins class before and after the series of FS sessions. Four boys (Finn, Ian, Liam and Luke) and four girls (Fiona, Jill, Tina and Aoife) were chosen randomly to participate. The names of those children who assented to participate in the study were put in a hat and four boys and four girls' names picked out by me. The focus groups took place in a meeting room in the school during usual school hours. See Appendix L and Appendix M. The focus groups were recorded on my phone and then transcribed. In the final week of FS, these children also completed a written task in class about their favourite part of FS (part of the usual work of the school) in the classroom. I photographed this anonymised material.

4.6.8 FS Children's Activity Pack

A look-back focus group was also planned with eight children from the Owls class. Due to the Covid-19 School closures, the Owls children's look-back focus group was replaced with an activity pack sent home via email by the class teacher to all the children in the Owls class (n=30) in June 2020. See Appendix N. Ten children returned a completed pack to the teacher who forwarded them to me, anonymised, via email.

4.6.9 Parent Sheets

As part of the normal work of the school, parents of the children participating in FS complete a sheet about their own child, before and after the series of FS sessions. These sheets were circulated and collected by the class teacher through the usual school channels for parent communication. See Appendix O. These items are based on the outcomes associated with FS described by O'Brien & Murray (2005). In the Owls, class, due to Covid-19 school closures, only the pre-session parent sheets

were completed²⁴. Two questions on the parent sheets for the eight children who participated in the focus groups in each class were analysed as a sample of parents' views about FS. The remaining questions and responses did not form part of the current study as the information related to parents' assessment of their own child's progress across a number of domains. This was not the focus of the current study.

4.6.10 Documentary Sources

I also had access to anonymised secondary data (part of the usual work of the school) that comprised the children's FS diaries and drawings (completed both in FS and back in the classroom) and staff FS observation and planning sheets. These documents all formed part of the usual planning, assessment and reflection framework used by the school for their FS sessions. The information about individual children on the staff observation sheets did not form part of the current study as this information related to teacher's assessment of individual children's progress across a number of domains. This was not the focus of the current study.

4.7 The National Survey

4.7.1 Participants

The principle of purposive sampling, using a snowball strategy, was used to select participants for the national survey (Robson & McCartan, 2016). The main criteria for purposive sampling is the researcher's judgement of suitability of participants from the population of interest. Having identified initial informants, these are then used to identify other members of the relevant population. In this study, the population of interest was adults in Ireland interested in and aware of the FS movement. A minimum of 200 participants was sought in order to facilitate the statistical analysis (Comrey & Lee, 1992).

4.7.2 Data Collection Methods

The Executive Committee of the IFSA and the two organisations that provide FS training in Ireland were asked to share the survey via their networks. The email contained an information sheet about the research and a consent form. See Appendix D.

The survey was circulated on social media platforms and via email using an online link by the researcher. Those who received it were encouraged to share the link

²⁴ Due to Covid-19 school closures, the planned look-back focus group with Owls class did not take place. The names of four boys and four girls had been selected randomly in advance of the series of FS sessions and the parents' forms for these children used in this part of the analysis.

to their own networks. It was also available in hard copy at FS events during the period September 2019 to June 2020. The survey was also circulated to staff who had worked in Bay School since FS was introduced there in 2012 (n = 40) in autumn 2019. A link to the survey was sent to the principal by email, who circulated it to all relevant staff. Paper copies were also made available to the principal should potential participants prefer to complete it in hard copy. Out of 40 eligible staff, 32 responded to the survey, a response rate of 80 % for this cohort of respondents²⁵. Two hundred and thirty-two (232) completed surveys were received by 30 June 2020.

4.8 The Pilot Phase

The pilot phase of the study took place from April to August 2019. The pilot study process resonated with Hammersley and Atkinson's (2019) view that '*the initial task is to shape a role for oneself in the setting that provides access to the sort of data needed*' (p.83). They go on to say:

It is frequently well into the process of inquiry that one discovers what the research is really about ...What this means is that the analytic task is as much about refining and developing research questions as it is about answering those questions (p.168).

There were two distinct aspects to the pilot phase in this study. Firstly, the pilot phase in Bay School and secondly the design and piloting of the national survey. Both are described in turn.

4.8.1 The Pilot Phase in Bay School

I participated in 12 sessions of FS with the Acorns class over six weeks during May/June 2019. Every Tuesday and Wednesday, the class (n = 30; aged 5/6 years) took part in FS from 8.30 am to 12 midday in a private wooded area adjacent to the school. See Figure 10, The Route to site One.

²⁵ All percentages are rounded to the nearest whole number.

Figure 10

The Route to Site One

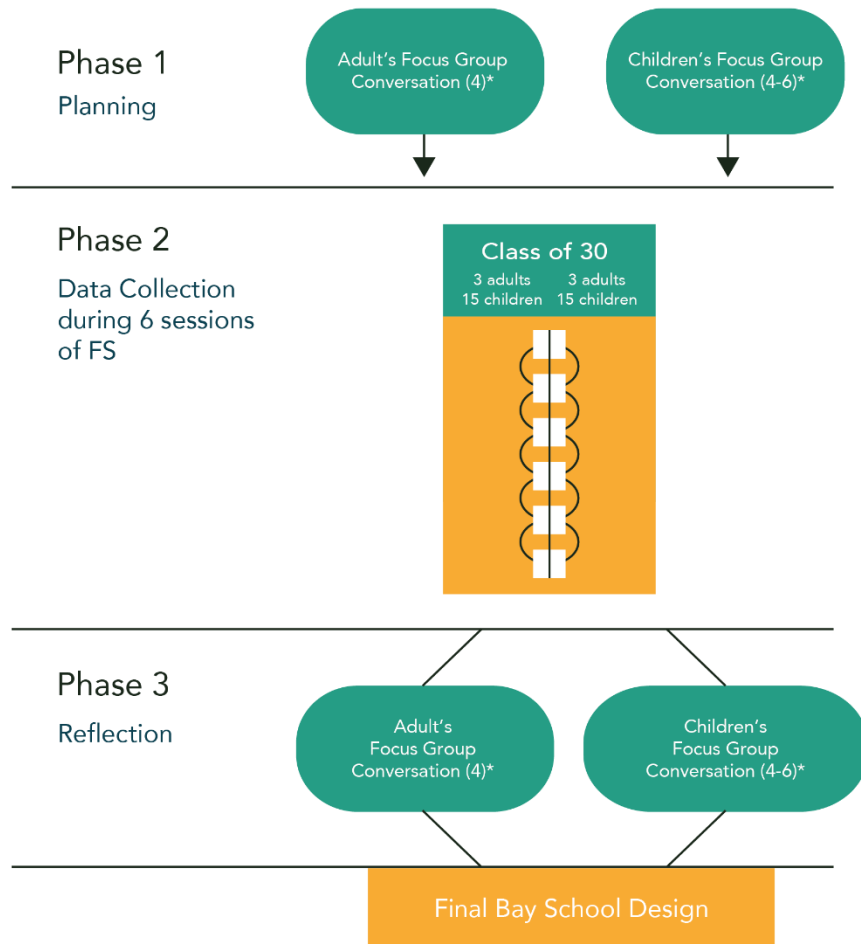


Source: Google Maps

Each FS session comprised half the class (15 children) and a minimum of two adults, including the class teacher and the FSL. A group of six children, three boys and three girls from the class group (of 30 children) participated in two 30-minute focus groups, one before and one after the series of sessions. The names of those children who assented to participate in the study were put in a hat and three boys and three girls were picked randomly by me to participate in the focus group. A similar process of consent and assent as described in sections 4.4 and 4.5 of this chapter was conducted for those participating in this phase of the study. The design of the pilot phase of the ethnography in Bay School is outlined in Figure 11.

Figure 11

The Pilot Phase in Bay School



* No of participants

A key focus of the pilot study in Bay School was to design a method of data collection during the FS sessions which would respond to the research question and be responsive to the FS context. I had designed a structured observation, with the idea of observing the six children participating in the focus groups during the FS session. It quickly became obvious that this was not workable. I moved to using an unstructured approach to writing fieldnotes which was far more successful.

A lack of clarity as to whether the focus of my study was evaluative or descriptive emerged during the pilot phase. Initially, I described my research design as mixed-methods action research (Ivankova, 2015). However, during the pilot phase of

the study, it became clear that the ‘action’ focus in my study was on action in the sense of ‘*what people do and why*’ (Hammersley & Atkinson, 2019, p. 170), which contrasts with the focus in action research on improvement and change. The ethnographer is there to understand the social group whereas action research is the process of actively changing practice through deliberate cycles of planning and reflection. In contrast, the focus in this study was on describing and explaining the ‘culture’ of FS in Bay School. As a result, I reframed my research question and set out an explicitly ethnographic strategy of enquiry.

During the pilot phase, I felt that the Bay School staff were feeling under pressure to demonstrate ‘best practice’ to me. I felt that this was associated with my role in introducing FS to Bay School in 2012 in my former role as principal there. Although I retired as principal of Bay School in October 2016, I was known to some of the staff and children and their parents. This position conferred a particular responsibility on me to be aware of the benefits and the challenges of such status. As Walford (2020) says ‘*Almost every ethnographer carries heavy baggage into the classroom in the form of her or his experience of classrooms as student or teacher*’ (p.131). Corbin Dwyer & Buckle (2009) suggest that such insider status generally means participants are more open, so potentially the data collected is richer; on the other hand, participants may assume an understanding on the part of the researcher and so do not explain their individual experiences as fully as they might in other situations.

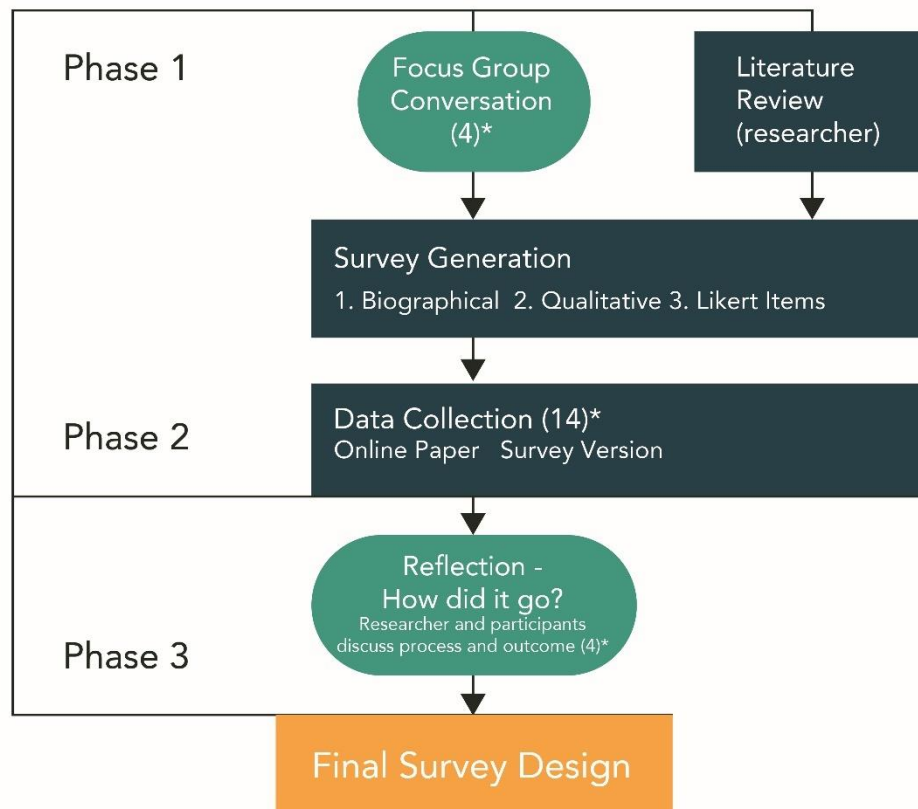
Becoming more aware of my positionality during the pilot phase was important. I took an active role in helping out in the sessions during the pilot phase. I took a less active role in the sessions during the main study. In the main study, I also made more opportunities for conversation, informally asking questions of the participants, to ensure that I was accurately representing their experience and understanding. Using my reflective diary was also helpful in setting out my feelings and ideas and in clarifying my thoughts during this phase of the study

4.8.2 The National Survey – design phase

The executive committee of the IFSA were invited in writing to participate in the design of the national survey. See Appendix D. A workshop to design the survey took place on 27 April 2019 in Kilkenny. Four members attended. A light lunch was provided. The procedure followed is outlined in Appendix P, The Design of the National Survey. Appendix P also contains the draft survey items. This process is set out diagrammatically in Figure 12.

Figure 12

The Design of the National Survey



* No of participants

Following some introductory remarks, I presented a set of draft survey items which contained 130 five-point Likert type items, biographical items and five open-ended items. See Appendix P. This selection of items for inclusion in the draft survey was based on the theoretical literature related to FS (described in chapters two and three). A search of pre-existing scales and empirical studies was undertaken. The first 77 Likert items examined environmental issues and the next 53 items explored beliefs about teaching and learning. These items were drawn from the following scales: The Connectedness to Nature Scale (CNS) (Mayer & Mc Pherson Franz, 2004); The New Environmental Paradigm Scale (NEP) (Dunlap, Van Liere, Mertig, & Emmet Jones, 2000); The Nature Relatedness Scale (NR6) (Nisbet & Zelenski, 2013); The Environmental Identity Scale (EIS) (Clayton, 2003); The Environmental Action Scale (Alisat & Reimer, 2015); The Educational Beliefs Questionnaire (Silvernail, 1992); The Pupil Control Ideology Form (Willower, Eidell, & Hoy, 1967) and The Inclusion of

Nature in Self Scale (Schultz, 2001). Individual items from Kerr (2013) regarding collaborative OE, the metaphors about teaching items from Wilhelmsson et al., (2012) study of OE, and individual items used in Savery et al., (2017) study of attitudes to risk in FS (15 items) were also included. Appendix P contains more details of each of these scales, including their psychometric properties.

Each set of items was introduced briefly with a description of what it measured. Participants were timed completing these items. An open discussion then took place. The conversation was audio- taped on my phone and handwritten notes were also taken. The length of the survey, duplication of items, intelligibility issues, especially around the teaching items, and the order in which the items were presented were the key points for discussion.

The pilot survey, designed following this workshop, is included in Appendix Q, The Pilot Survey. It comprised 63 Likert items. Twenty-nine items sought participants attitudes on environmental issues. These items were drawn from the NEP (Dunlap et al., 2000) (15 items) and the CNS (Mayer & McPherson Franz, 2004) (14 items). These items comprised dimensions associated with environmental concern, eco-friendly actions and affective and experiential connection to nature. The remaining 34 Likert items explored beliefs about pedagogy and attitudes to risk in learning outdoors. They comprised 18 items from Silvernail (1992) regarding ideologies associated with teaching; ten items from the Savery et al. (2017) study of attitudes to risk in FS and five items from Kerr (2013) regarding collaborative pedagogy. One original Likert item about learning in the natural environment was also included.

The pilot survey also included five open-ended questions to qualitatively explore participant's understanding of FS. Biographical information was also sought (gender, age group, geographical setting, education setting, occupation, educational qualifications and FS qualifications). There were also two closed questions about organising and participating in civic action on environmental issues in the previous year.

The pilot survey took approximately 15 minutes to complete. The online version compelled people to respond to each item before they could continue, with the exception of the open-ended questions which remained optional on both forms.

Nine members of the IFSA executive, including four who participated in the initial focus group, and three other former teacher colleagues, were invited to complete the pilot survey online. Two former teacher colleagues were invited to complete a paper

version of the pilot survey. Four surveys were completed online and two in hard copy. Small further edits were made for readability and one of the five open ended questions was dropped and replaced with a question about definitions of good teaching. The final survey is included in Appendix R, The National Survey.

4.9 Data Analysis

The task of the ethnographer is to describe and make sense of what has been observed in the field. It is an iterative and tentative process of clarifying the meaning of the researchers' observations and beginning to appreciate and understand the relationships between them, moving systematically towards the creation of '*phenomena that seem to share something interesting in common*' (Hammersley & Atkinson, 2019, p. 178). The focus of the analysis is on:

Actions, the meanings that underpin or infuse them, the routines and contingencies within which they take place, and the wider situations and institutional patterns that these actions both respond to and shape. Furthermore, all these different aspects are intimately related (Hammersley & Atkinson, 2019, p.171).

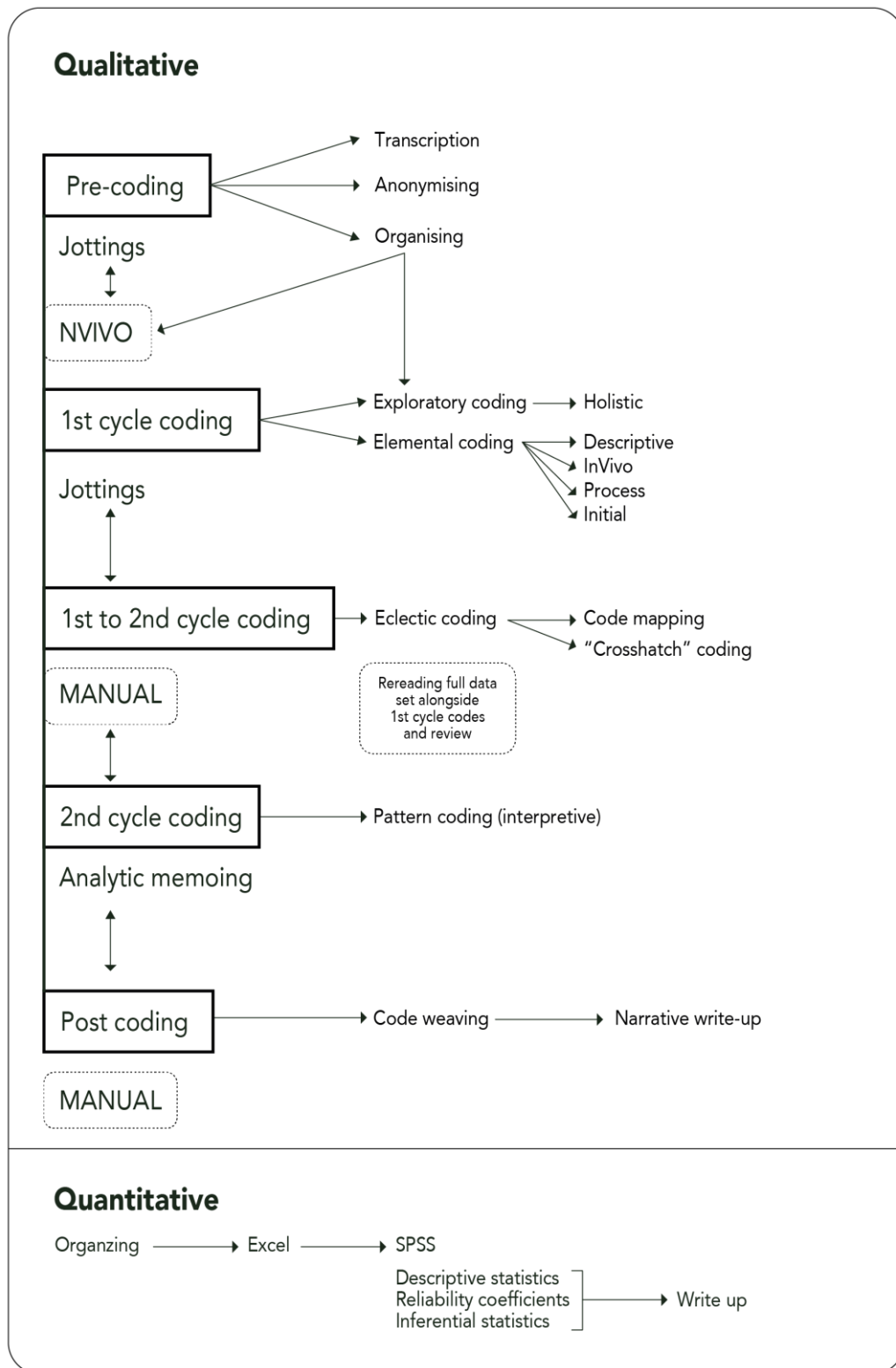
Wolcott (1994) describes analysis as a threefold process of describing, analysing and interpretation. A key element of the process of data analysis and the subsequent write up of the study is the management and integration of the different sources of data, both within, and across, the qualitative and quantitative datasets. The relative 'weight' of the different sources of data collected must be explicitly stated. An explicit statement of how this process was managed is all part of the validation of the study (Ivankova, 2015). Being too cautious '*...can generate invalid or weakened conclusions through a failure to consider all available information together* (Bazeley, 2012, p. 814). Thus, being explicit about the methods used and how they are, or are not, integrated, is essential. The following sections describe in turn the qualitative and quantitative data analysis procedures used in the study.

4.10 Qualitative Data Analysis

An inductive approach to qualitative data analysis using the Miles et al., (2014) framework and the Saldana (2016) approach to coding was used in this study. See Figure 13, Framework for Data Analysis.

Figure 13

The Framework for Data Analysis



Note. Based on Miles et al., (2014) and Saldana (2016).

4.10.1 Pre-coding

Coding is the process of assigning meaning to units of text. While different ways to code are proposed by different writers, the steps follow a similar path and are guided by the idea of coding as a conceptual web (Miles et al., 2014). The first step was a pre-coding process of making field notes accessible (holistic coding).

All focus groups and review meetings were recorded on my phone. The audio recordings were transferred to my laptop. Two steps were used to transcribe the data set. Firstly, I listened to the audio files following each session and made additional handwritten jottings, or notes, in my reflective journal. Secondly, the audio files were transcribed by me using Sonix software <https://sonix.ai/>. All the transcriptions were then anonymised and edited into a Word document. Images taken by me and photocopies of anonymised pages from the children's diaries were appended to the relevant session Word document. Documentary sources (staff review sheets and parent sheets) were anonymised and copied. Each piece of data was identified only by a code letter or number. Notes for follow up were made, such as reminders to attend to certain things or thoughts about the data that were puzzling or interesting. I wrote these in my reflective diary or made notes on the transcripts. Following the completion of the series of sessions, the full qualitative dataset was entered into NVIVO 12.6, a qualitative data analysis software package. The five open-ended questions on the national survey were initially entered into an Excel file. They were then edited and this dataset was also entered into a separate NVIVO 12.6 file for further analysis.

4.10.2 First Cycle coding

First Cycle Coding is a process of selective data reduction. The following exploratory coding methods (Saldana, 2016) were used in this stage of analysis:

- Holistic coding (capturing an overall 'sense' of the dataset)
- Descriptive coding (describing patterns in the dataset)
- In Vivo coding (actual voices in the dataset)
- Process coding (noting action sequences in the dataset)
- Initial coding or open coding (opening up the dataset)

This process led to an initial list of 116 codes. See Appendix S, List of Initial Codes and Code Mapping. The qualitative survey dataset was coded separately, manually, using a similar process of inductive thematic analysis.

4.10.3 First to Second Cycle Coding

Saldana (2016) proposes an intermediate stage between First and Second cycle coding. This stage uses what he describes as ‘eclectic coding’. In this study, this comprised:

- A full rereading of the qualitative datasets
- The use of Code Mapping (See Appendix S)
- Rereading of memos and jottings and a final rereading of the dataset.

This was a key and protracted phase that extended over many months from summer 2020 to late spring 2021. I moved from using NVivo to manually marking the texts. Code Mapping comprised examining all the codes generated in the first phase and writing draft narratives under different headings, followed by manually reassessing and reorganising the codes through a process of cutting and pasting. I use the term ‘cross-hatch’ coding to describe preliminary narratives written by me during this phase of the analysis. These ‘cross-hatch’ narratives were based on groups of initial themes. See Appendix S. I also reviewed the images taken during the FS sessions. Images were included (in chapter five) for the purpose of illustrating the narrative.

I now had a document of approximately 180,000 words comprising a series of narratives. I was feeling very overwhelmed. However, I had a much clearer understating of my dataset and of the ethnographic approach to data analysis and to writing. I reread the relevant literature on ethnographic data analysis, particularly the work of Wolcott (1994) as I was concerned that the ‘analytic’ stance was not apparent in the writing. I had not at this stage begun to analyse either the qualitative or quantitative survey data. I reread my interpretive comments, reflections and analytical memos and draft narratives. A key moment was the realisation that my focus to that point had very much been on the actual experience in the forest. I realised that the ‘before’ and ‘after’, associated with the planning and reflection process in Bay School, were equally important to the pedagogical experience of FS. That was a lightbulb moment and paved the way for a framework to write up the study that was both inclusive of the various ‘voices’ of the participants and also accessible to the reader. I realised too that I needed to refine the analysis further in closer alignment with the conceptual framework and the research questions that I had set out to answer. These steps are discussed in the next section.

4.10.4 Second Cycle coding

At this point the ‘story’ that was emerging was threefold: Before FS, The FS Session and After FS. I felt that I moved fully into Second Cycle Coding or pattern

coding at this point. Second cycle coding is an interpretive process, drawing more fully on the literature and prior knowledge to assist in grouping first cycle codes into categories or themes. This process of interpretation is associated with analytic memoing. Analytic memoing is a higher order process of synthesis associated with conceptual understanding (Miles et al., 2014). This iterative process leads towards assertions and propositions, a process of beginning to make links between different elements of the data set and slowly and iteratively moving towards an interpretive stance (Miles et al., 2014). I reread the entire dataset with that lens. I felt confident that I had captured the ‘culture’ of FS in Bay School, which is an essential part of successful ethnographic study.

I had at this point manually coded the qualitative survey data using a similar process of inductive thematic analysis. I engaged in this process with the benefit of the earlier stages of the study and so was able to more swiftly align these themes with the conceptual framework. Manual coding was also more meaningful and thought provoking for me. The quantitative data analysis (described in detail in the next section) was also informing this process.

4.11 Quantitative Data Analysis

All quantitative data was entered into an Excel file. I input paper versions of the survey (n=33) manually. Online surveys (n=199) were transferred from Google Drive into an Excel file. The Excel file was then input into SPSS Version 26.0. Descriptive statistics about participant characteristics were generated. In keeping with the overarching exploratory nature of the study, EFA using Principal Axis Factoring was conducted on the 63 Likert items to explore the latent variables underlying the participants responses to the Likert items in the survey. Creswell, Plano-Clark, Gutman & Hanson, 2003) describe EFA as an appropriate statistical technique in an exploratory study and also as useful in enabling the merging of quantitative data in a mixed-methods study.

4.11.1 Exploratory Factor Analysis (EFA)

EFA is a statistical technique which can be applied to a set of variables, in this case the individual Likert items, in order to examine whether there are variables which form ‘*coherent, relatively independent subsets*’, within the complete set of items (Tabachnick & Fidell, 2001, p. 635). EFA was used descriptively in this study to explore the constructs which the participants were using in their responses to the Likert items. EFA provides a tool for consolidating these variables (into factors) and for

generating ideas about underlying processes. In this process, the initial set of Likert items are reduced in number to a more manageable dataset. Interpretation is based on the meaning which can be assigned to a particular subset or 'factor'. The greater the number of variables that correlate with a factor, the more likely it is that coherent meaning can be interpreted. The 63 Likert items in the survey were reduced to 25 following the EFA. The items that did not contribute to the factors were excluded from further analysis.

EFA also enhances the validity of the findings. Using the three factors (rather than the full set of Likert items) provides greater clarity about the particularity of the constructs informing these respondents' perspectives and attitudes. Therefore, in the second stage of the analysis, when the different grouping variables are explored, there is greater confidence that the inferences being drawn are accurate and stable. The challenge in EFA is to develop a properly constructed hypothesis of all the potential factors underlying the area of interest. In this study, the choice of items for inclusion in the survey was guided by a focus group discussion with experienced FS practitioners. The selection of draft items was based on an extensive literature review of existing relevant psychometric scales and non-psychometric items from relevant studies.

EFA involves two statistical processes: factor extraction and factor rotation. Different methods can be used depending on the nature and the purpose of the study (Field, 2009). In this study, Principal Axis Factoring was used to extract the factors and so *'conclusions are restricted to the sample collected and generalisation of the results can be achieved only if analysis using different samples reveals the same factor structure'* (Field, 2009, p. 637). Factor rotation methods can be oblique (factors are related) or orthogonal (factors are independent). Field (2009) suggests that in the social sciences *'there are strong grounds to believe that orthogonal rotations are a complete nonsense for naturalistic data'* (p. 644). In this study, direct oblimin, an oblique method of rotation, was used.

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) were used to determine the suitability of the dataset for EFA. KMO values above .7 are regarded as good (Field, 2009). Bartlett's Test of Sphericity should be significant at the .000 level (that is the value for significance should be less than .05). In order to identify variables that are good indicators of potential factors in this study, only variables with a minimum factor loading of .4 (Tabachnick & Fidell, 2001) were included. Eigen values (above 1) and

scree plots were also used to inform this decision. Sample size affects the reliability of EFA. Comrey and Lee (1992) regard a sample size of 200 as fair and 300 as good. However, this is also related to the number of items in the survey and how representative the survey participants are of the area under study. Given the size of the FS movement in Ireland and the process used to guide the selection of items included in the national survey, 200 was deemed an appropriate sample size.

Decision making in EFA requires both theoretical knowledge (regarding the area of study) and statistical knowledge, so that the interpretation of the EFA is both statistically coherent and theoretically sound (Field, 2009). The researcher has the final say regarding the interpretability of the factors, a situation which can sometimes call objectivity into question. However, acceptance of some ambiguity may lead to information not otherwise attainable and is arguably an essential aspect of EFA. Another potential limitation is the presence of factors of differing complexity which may not be fully unravelled. Pooling results from diverse groups of participants or the failure to include relevant items in the first place may distort the apparent relationships among the factors. To quote Tabachnick and Fidell (2001), *‘under these circumstances, both the theoretical and practical limitations...are relaxed in favour of a frank exploration of the data’* (p. 639).

Following an initial exploratory phase of EFA (See Appendix T, Initial Statistical Steps for EFA), I decided to treat the Likert items in three groups as follows:

- Environment (29 items)
- Pedagogy (18 items)
- Risk and Learning Outdoors (10 items)

Five items about learning science outdoors were set aside as they did not load on any factors and were not theoretically coherent. The single item about participants’ attitudes to learning about nature was also excluded for similar reasons and was reported descriptively. It became apparent that single factor unrotated solutions were more likely and more theoretically coherent. Thus, maximal extraction of items (the more items that load onto a single factor) is prioritised over rotation. The final stage is naming the factors. Three single factor unrotated solutions were produced and named, as follows:

- Nature Connection (12 items)
- Traditional Pedagogy (7 items)
- Risk and Learning Outdoors (6 items).

This step was followed by reliability analysis. Cronbach's alpha (Cronbach, 1951) is a widely used measure of reliability, that is, the internal consistency of a factor. Alpha ranges from 0 to 1, with acceptable values from .7 upwards. All three factors were above .7 (regarded as good). The second part of the analysis could proceed. This involved a series of tests to examine differences between groups of participants. The Bay School grouping variable ($n = 32$) comprised 14% of respondents. The FSL grouping variable ($n = 103$) comprised 45% of respondents. The primary settings grouping variable ($n = 121$) comprised (52%) of respondents. The Bay School grouping variable was identified by using a separate link (or code on the paper version) to the survey. The FSLs grouping variable was based on the responses to a question on the survey which asked respondents about their FS qualification. Participants chose from five response categories (Yes/No/In training/ Intend to train/ Other). The primary school settings variable grouping was based on the responses to a question about the setting they were mostly based for work. Participants chose from six categories (early years, primary, secondary, third level, community setting and other). The categories were not exclusive. The Bay School grouping variable included two FSLs. The primary school settings variable includes all of the Bay School respondents and others who worked mostly in primary school settings. Some of these respondents were also FSLs. The FSLs grouping variable included respondents who were also working in primary school settings.

Descriptive statistics (frequencies) were used to examine the responses to the three factors for these three groupings. However, descriptive statistics merely indicate a difference between groups. To explore the magnitude (the statistical significance) of any differences between the groups, each scale must first be examined for normality, so that the appropriate test is used. Visual inspection using histograms and the Kolmogorov-Smirnov Test (p values less than .05 indicate that the data is not normally distributed) were used to test the normality of the data (Connolly, 2007).

As none of the three factors were normally distributed, differences between the grouping variables were explored using the Mann Whitney test (Field, 2009). This relies on the median as a measure, rather than the mean. The independent variable is the participant grouping variable and the dependant (outcome) variable is the response to the three scales. This step allowed me to confirm or to reject statistically significant differences between the different grouping variables. Effect sizes (r) range between 0 and 1; $r = .1$ is a small effect; $r = .3$ a medium effect and $r = .5$ is a large effect (Cohen,

1988/1992, cited in Field, 2009, p. 57). The effect size is calculated by converting the z score (calculated in SPSS) into an effect size estimate, r (Connolly, 2007).

4.12 The Write Up

While narrative description is the classic approach to presenting ethnographic analysis (Van Maanen, 2011, there are myriad ways to present findings, ranging from *‘descriptions and explanations of particular courses of action and events at one end of the spectrum while the development of general theories or what we have called causal models, is at the other’* (Hammersley & Atkinson, 2019, p. 181).

In this study, chapter five comprises a narrative description of the FS sessions in Bay School, based on my field notes. Chapter six presents the understandings and experiences of the staff, the children and their parents. It is based on focus groups and review meetings with, and documentary sources provided by, the staff; and focus groups with, and written work completed by, the children. The analysis of the parents’ responses was mostly numeric and given the small data set, a full qualitative account of responses is provided. Chapter seven presents the analysis of the national survey.

This approach to the presentation of the findings enables the different voices of the staff, children and parents who participated in the study to be preserved. The staff voices are pre-eminent in this presentation of findings. The prioritisation of the staff views is justified on the basis that how these adults understand and experience FS influences what comprises FS in Bay School. Their mature experience (Dewey, 1975), as well as their professional understanding of pedagogy and curriculum are central to how FS is understood and experienced in Bay School. Setting out these different perspectives means that points of similarity and difference with how FS is understood and experienced in Bay School by these participants can be compared with the narrative based on my field notes (described in chapter five) and can also be contextualised within the findings of the national survey presented in chapter seven.

Chapter eight is an interpretive one that seeks to draw together these findings in light of the literature review and the conceptual framework. This chapter sets out how the lived experiencing of FS makes sense to those participating in it, using the van Manen (2016) lifeworld framework. This comprises what van Manen (2016) calls ‘essential themes’ as a way to consider lived experience or lifeworld. While essential themes can be explained and written about separately, they form an *‘intricate unity’* that is the lifeworld (van Manen, 2016, p. 105). While this is not a phenomenological study (van Manen, 2016), this phenomenological approach to the write up is aligned with the

inductive approach to analysis used in this study²⁶. Van Manen (2016) describes a phenomenological text as a way of communicating through text the essence of a phenomenon. The language of such texts must remain oriented to the experiential; in this study, that represents the lived experiencing of FS for these participants. This approach to writing up the study enables the ‘*multiple stories*’ (Bazeley, 2013, p. 150) that comprise ethnography to be told and the deeper meaning and analytic structure in the data to be uncovered (van Manen, 2016).

4.13 Conclusion

This chapter has described the research design used in the study. The study sought to provide new information about the experience and understanding of FS and its potential as a caring, relational pedagogical approach in the Irish context. The ethnography in Bay School tells the story of FS in one unique setting, using multiple methods of data collection. That story is contextualised with a national survey of adults interested in the FS movement in Ireland.

Data analysis maximised the different data sources to provide an in-depth study of FS in Bay School, recognising its uniqueness, while helping to identify the generic qualities of FS that may be shared by FS more generally. Triangulation of the different data sources enabled convergent findings to be identified, while highlighting divergent, and emergent, findings. This approach to the study enabled me to identify the connections, and divergences, between observed practice (that is my participant observations) and the experience and understanding described by the staff, the children and the parents, as well as the wider Irish FS community. The different methods selected provided not only for triangulation, but also enabled a more comprehensive analysis of the experience and understanding of FS in this exploratory study. The impact of my own positionality is discussed throughout.

The ethnographic strategy of enquiry is aligned with the conceptual framework of the thesis, and echoes the emergent nature of the FS pedagogical approach. It is appropriate for the exploratory nature of the study. The following chapters tell the story

²⁶ Phenomenology enables us to study an individual’s world as they live it, pre-reflectively, and, consequently, what it means, in more depth, to live in the world (van Manen, 2016). In contrast, ethnography is concerned with the shared culture of a particular group in a particular context. Van Manen (2016) does acknowledge a ‘*phenomenological quality*’ (p. 22) to such ethnographic accounts.

of how FS is experienced and understood in Bay School and how, or if, that story is echoed in the Irish FS community.

Chapter 5: Findings

Temporal Routines and Pedagogical Practices in FS

'Forest School. Day One: It was amazing. We played and played and played and ...that's all we did. Ha ha' (Paul, child).

5.1 Introduction

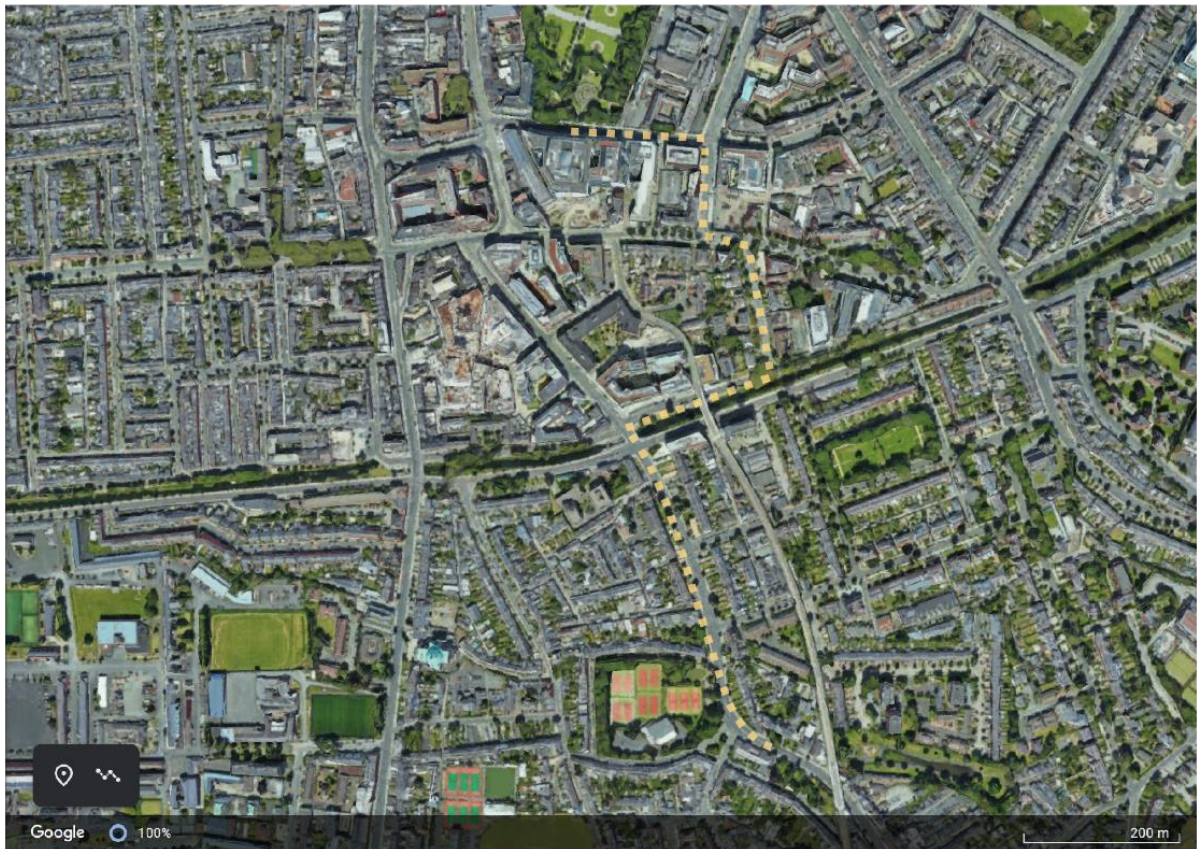
The aim of this ethnography was to describe how FS is experienced, and understood, in Bay School, the first Irish primary school to introduce FS in 2012 and in turn to situate that experience and understanding within the understanding of the wider Irish FS community, in order to explore the potential distinctiveness of FS as a caring pedagogy. This first chapter of findings sets out the temporal routines and pedagogical practices that pertained in FS in Bay School. It is based on naturalistic fieldnotes, jottings and analytic memos (mini- analyses of the meaning or learning related to an event) written by me, and images taken by me, as participant-observer, during 22 FS sessions in Bay School between September 2019 and March 2020. The chapter is presented in two parts. The first is a composite narrative of the temporal routines observed by me during those sessions of FS. The second half of the chapter describes the pedagogical practices observed in FS in Bay School, using narrative and vignettes. Pedagogy is understood as *'that set of instructional techniques and strategies which enable learning to take place... It refers to the interactive process between teacher and learner and to the learning environment'* (Siraj-Blatchford, Sylva, Muttock, Gilden & Bell, 2002, p. 28). The next section introduces these narratives by describing the sites used in Bay School for FS

5.2 Sites

Two sites are used for FS by Bay School. Site one is a small, wooded area that is part of a local privately owned tennis club. It is a short walk (200m) from the school. See Figure 10. This was the site used for the pilot phase of the study. The second site is in a public park within walking distance of the school towards the city centre. See Figure 14. The 1.4 km walk to site two is indicated by the yellow line. Site two was used in the sessions described in the main study, except for one session. The weather was particularly wet and stormy that day and so a last-minute decision to use site one instead was made.

Figure 14

The route to FS



Route from Bay School to
Forest School (Main site)

Source: Google Maps

A more detailed bird's eye view of site two is provided in Figure 15, A Birds Eye view of FS and the Park. The area enclosed by the yellow line is the boundary of FS. The area within the boundary is roughly rectangular, approximately 12 m by 70 m. It is marked at either end with a grandmother and grandfather tree, around which boundary flags are placed. Both are horse chestnut trees with girths of almost four metres. The right-side boundary is marked by a ditch and a three metre high stone wall that dates from the nineteenth century. The left-side boundary, towards the parkland, is marked by a curving gravel path and large fragments of statuary and granite steps half-buried in the undergrowth. There is a clearing in the centre of the rectangle marked by four horse chestnut trees, which are in turn enclosed by mature Scots pine. This area is used as 'base camp' during FS. Throughout the site there are mature Scots pine, horse chestnut,

oak and sycamore trees, interspersed with holly, bramble and laurel mid-level cover. While there are pathways through the FS site, which have been made mostly by the children while participating in FS, there is profuse ground cover of ivy, thorn and gnarly roots. The ground is uneven and hilly, with lots of overgrowth, loose growth and low branches for den and shelter building. The only ‘permanent’ equipment are the tree stumps used as seating in the base camp area. Other areas of the public park are used on occasion, such as the fountains, the waterfall, the ‘mountain’ (a hilly, stony area), the parkland and the maze. The ‘moat’ was formerly just that and has steep sides, often used for rolling down.

Figure 15

A Birds Eye view of FS and the Park



1 The maze	2 The fountains	3 The moat
4 The mountain	5 The waterfall	 Forest school area

Source: Google Maps

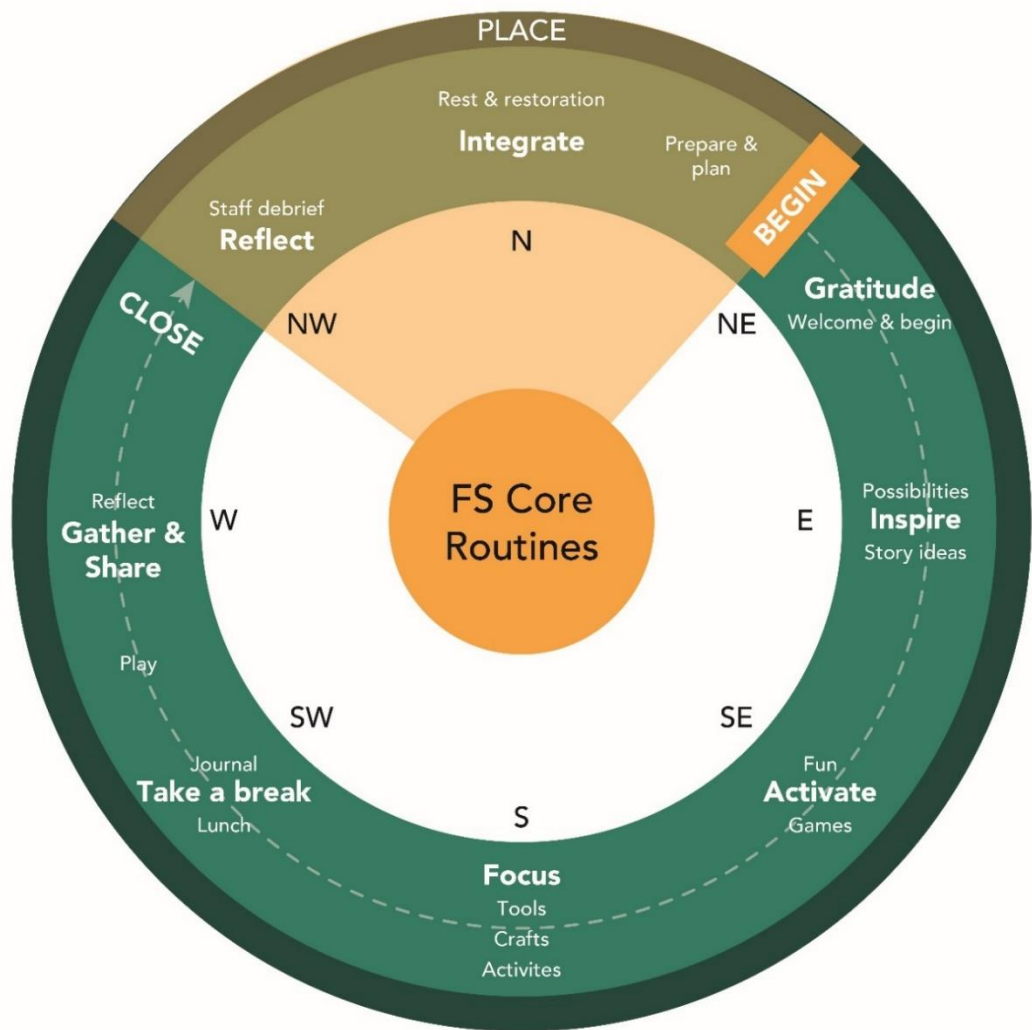
5.3 Temporal Routines

Aligned with a progressive, experiential paradigm, in FS a group of learners and leaders spend a sustained period outdoors, in the same wooded environment, once a

week, ideally year-round. This section describes that pedagogical process in Bay School as a series of temporal routines, aligned with the natural cycle of learning (Young et al., 2016). Figure 16 maps the Bay School FS core routines onto this framework. The following sections describe these core routines in more detail.

Figure 16

The Bay School FS Core Routines



Note. Adapted from Young et al. (2016).

5.3.1 North / North-east Routine One: Preparations

The FSL prepares. When I arrive at 8.15 am, Laura (the FSL) has already prepared the equipment for the day. On one table, there are two large plastic boxes. One contains high-visibility jackets and 15 sets of childrens' gloves. The second box contains clear plastic bags, labelled with the names of the children. There is a hardback notebook (the diary) and three felt-tipped makers in each plastic bag. Five small rucksacks are lined up on the counter, ready for individual children to carry down to FS. These contain three flasks filled with hot water and hot chocolate, cups, a jar of coffee and a box of teabags, a box of biscuits, boundary flags and the first-aid kit.

Laura has her own rucksack with her risk assessment sheets, phone, camera and emergency contact details. She carries an anaphylactic pen for one child and individual snacks for another with gluten intolerance. The teacher observation sheets, covered in a plastic transparent sheet, are ready with a pen on a string and a clipboard for the two staff members participating in the session. The portable trolley on wheels is ready in the school yard. It contains the equipment needed for the day, including ropes, tarpaulins, tools, nature identification materials (including books and magnifying glasses), wet wipes and a large water bottle.

Getting ready for FS. Children and parents began to arrive from 8.30 am. The distinctiveness of FS days is immediately obvious in the clothes worn by the children and the absence of schoolbags. Children come into the room with their FS bag, a nylon drawstring-type bag, containing their lunch and a water bottle. The children are wearing waterproofs, wellies, hats and extra layers. Some start taking off the layers in the indoor heat. On the first morning, each child gives a plastic bag with a change of clothes to Laura, in case they are needed during the series of sessions. Laura reminds the children to put on a high visibility jacket. The children take their diary bags and gloves from the table. There are two staff present and both are dressed for outdoors. The teacher lets Laura know of any children who are absent.

Coming together. At about 8:50 am, Laura kneels down and began to clap some rhythms on the floor. The familiarity of the children and the adults with this routine is obvious as they gather into a circle on the floor. The chatter ebbs as everyone concentrates on the rhythm. As everything becomes quiet, Laura greets everyone. She gives one child a clipboard and asks him or her to tick off the names of those present. She often mentions weather during this time, particularly if it is wet or windy, noting

that the tarpaulin will have to be erected, or that we must walk carefully if it is windy. Sharing out the jobs is also part of getting ready for FS. Pulling the trolley is highly sought after; carrying the small rucksacks less so. Laura often mentions how many weeks remain in FS for the group during this part of the session.

What would you like to be called? Whenever a teacher joined the session for the first time, Laura asked how she or he would like to be called in FS, by her or his first name or the usual formal title of Ms or Mr. Children address staff by formal titles during the regular day in Bay School. This routine also marked FS as different to the classroom. Four out of the five teachers said they preferred to be called by their first name in FS. For the children, this does not present any particular surprise or reaction, perhaps given that the general atmosphere in the school is informal. I observed most of the parents call teachers by their first names and vice versa; staff freely use first names to each other within earshot of the children.

Finding partners. As part of getting ready to walk to FS, the children were invited to partner in twos. This followed a routine, whereby there was always a rush by children to pick a preferred partner to walk, often a ‘best friend’ or group of friends. This often resulted in some groups of threes and some children left without partners. This routine was a source of stress right through the sessions and was often mentioned in the review chat following the sessions. It seemed that, on the one hand, choice was being extended to the children to pick partners; on the other hand, this choice was being limited by adults’ concerns about some children being left out and children’s wish to walk with particular friends. What seemed different was the attention given to finding ways to manage this routine by the adults and the level of discussion it engendered each week. Once we got moving, there was often movement to different partners as we walked. This was left unremarked, unless the staff had an ongoing concern about a particular child or children being isolated by the rest of the group.

The journey. On leaving the school yard, we pass alongside a local park, where the children play at lunchtime during the regular school day. This had been renovated by the school in recent years as part of a community project and is well used and much loved by the children. The FSL walks at the head of the group of 15 children and three adults and sets a relaxed pace for the journey. A teacher walks halfway along the group, between the children and the road. The third staff member is walking about two-thirds of the way down the line with two children. I walk at the back of the line. Most of the children, and the adults, are chatting animatedly to those near to them. The

children are very familiar with the route which is followed without fail each week. See Figure 17.

Figure 17

On Our Way



We are in a noisy urban environment and cross a number of major roads. This is a busy time with a lot of traffic and adults making their way to work. The children are often watched by these adults who smile at the group as we pass. Part of the route brings us alongside a canal and under a railway bridge. Each week, we pass a man sitting here, with a small sign seeking money. He too smiles as we pass. We pass sleeping bags and tents closer to the city. The journey to FS is seen as integral to the FS session and has been highlighted as a way to help the children relax and get to know each other and the staff.

5.3.2 North-east Routine Two: Arrival

The grandmother tree. We arrive at the park and the children spontaneously start to cheer and hug each other. We walk in to the FS site and stop at the grandmother tree. She marks the entrance to FS and looks after this place. This tradition of a sacred

tree, who acts as a protector and elder of the forest is associated with indigenous communities. Laura sometimes sings a song of welcome to nature and always remarks on the role of the grandmother tree as the guardian of the forest. The ‘grandfather’ tree marks the opposite boundary of the FS site. Figure 18 is an image of the trunk of the grandmother tree with the boundary flags around her.

Figure 18

Grandmother Tree with Boundary Flags



Boundaries. Two children put up the boundary flags, trying to work out where to position them around the substantial girth of this elderly, horse chestnut, grandmother tree. Boundaries are used in the FS sessions to build understanding of limits and are non-negotiable. They are an important marker of physical safety for the group. For the teaching staff, implementing boundaries on occasion was a source of tension as they seemed to conflict with the learner-centred principle of FS, or what was often referred to as the ‘child-led’ philosophy of FS. For Laura, this was much clearer cut: boundaries were there for a reason and were not to be breached.

Risk assessment. Risk assessment follows each week at this point. Laura asks two children to go into the FS site with her while the rest remain at the grandmother tree

with the other staff. Laura highlights natural hazards such as overhanging branches, roots in the ground, thorns and brambles, as well as litter, glass and other human-made dangers. The children over the weeks are increasingly encouraged to take the lead in identifying any potential risks from these hazards. The risk assessment report is discussed as part of the opening circle. This is usually led by the two children, who stand up formally to give the report. It is always emphasised by Laura that everyone must listen carefully to this report. All the children get a turn to give this report and to participate in the risk assessing over the series of sessions. In addition to the formal reporting, Laura consistently mentions risk assessment, in relation to weather, clothing, waste, tool use, woodland management and to activities the children wish to undertake. The tone of this interaction is always about risk and benefit, that is assessing the risks in order to help to make good choices, rather than to limit activity.

Calls in FS. A wolf howl from Laura is the signal for the group to enter FS. The group race to the centre of the FS site with whoops and cheers. There is a clearing here between four horse chestnut trees that is known as base camp. This is where the log circle is set out and where the opening and closing circles take place. See Figure 19. At this point, most of the children excitedly take off their high visibility jackets and put aside their bags. While all the children have gloves, only a small number of children wear them.

Animal calls are used in FS to signal that everyone should return to base camp or make known where they are. Usually, Laura and the children identify a call that the group will use throughout the sessions, for example a wolf howl or a birdsong. Like the boundaries, this is treated as non-negotiable in FS. In the sessions I observed, there is huge respect from the children for these calls and they generally evoke an immediate response. Laura also uses call and response games for this purpose, most usually a game called '1,2,3, Where Are You', to which the children respond '1,2,3, I Am Here'.

Figure 19
Base Camp



5.3.3 North-east / East Routine Three: The Opening Circle

Sitting in a circle. The opening circle is a time for everyone to come together as a group and to set out the plan for the session. Adults and children sit into the log circle together. Some weeks the logs are in a circle from the previous session; other times the children find them elsewhere on the site and move them into a circle. Once everyone is seated, Laura welcomes the group and the risk assessors are invited to give their report. Most days one or two children stand or move around while the opening circle takes place.

Sit spots. Some weeks, the session starts with an individual ‘sit spot’ or a group meditation. A ‘sit spot’ is a favourite place in FS, where each person returns, alone, to be still for a few minutes. The return to the circle is marked by a call from Laura, often sounded softly at first and repeated twice more loudly, each time returned by the children and the adults as they walk to base camp. A group meditation usually involves everyone lying down in the circle with our feet facing the centre. See Figure 20. Laura never interrupted the meditation or the sit spot, even when some children

giggled or chatted or moved about. Afterwards, there was usually a chat about how people found the experience and acknowledgement of their different responses.

Figure 20

Meditation



Giving gratitude. Giving gratitude is also part of the routines of FS. One week, the children were asked to think of ways to give gratitude to a teacher who was retiring from the school that week, using the resources of the forest. Each child and adult made a piece of nature art to honour this teacher. Following the making of the art, there was a ceremony where each child presented their ‘gift of gratitude’ and said what it symbolised. More usually, the children gave gratitude for different aspects of their time in FS, often to do with food, or being able to play particular games, or be with particular people or their enjoyment of being close to their trees or for time spent in the woods.

5.3.4 South-east / South Routine Four: Main Activity and Skills

Each week, a main theme, a skill development or an activity was planned in advance. This is the part of FS most closely aligned with a ‘learning activity’ or the main part of a classroom-based lesson. Learning to use tools, rope skills, playing games

and creative nature-based activities, such as making drama, nature-based art, shelter and den building, were the main activities I observed. Fire-making is an important routine in FS practice; however, fire is not permitted in this site²⁷. The planned activity did not always go ahead, usually in response to what Laura perceived as the ‘mood’ of the group, or the weather, or both.

Tools used in FS included loppers, secateurs, bowsaws, hacksaws, billhooks, knives for cutting and whittling (or peelers for whittling); hammers and mallets, hand drills and palm drills. See Figure 21, Tools.

Figure 21

Tools



The ‘tooltalks’ given by Laura always highlighted the importance of using the tools correctly. Four basic rope knots are set out in the plan to be taught: Half hitch,

²⁷ In Bay School, fire is demonstrated in site one and the children learn how to use fire steels to ignite a flame and to toast marshmallows on sticks. They also make charcoal.

timber hitch, clove hitch and a reef knot and two lashings, shear lashing and square lashing. I saw the first two taught during the sessions I attended. Using tools and ropes was strictly controlled and closely supervised by Laura close to base camp. Children were not permitted to take tools away from this area without permission.

Laura always introduces these skills development activities by explaining that in order to make good choices, they need to see the demonstration. There is a strong sense of helping the children to understand that making certain choices implies different responsibilities. Laura usually set out the approach she would like them to use, for example, whether to work alone or in groups or pairs; whether tools were to be used or not; approximately how much time they will have; what materials to use and where they might be found. This is not presented in a prescriptive way, rather as ideas and choices. Most activities use nature-based themes and the resources of the forest. Nature art is often used as a way to give gratitude to the forest, to say thank you for the resources it provides for us. Figure 22, Rafts, shows a raft made with sticks and ivy by one child as a gift of gratitude.

Figure 22

Rafts



The staff often use this time to practice their own skills with tools or crafts, alongside the children. Most of the adults I observed during the sessions had not previously taken part in such nature-based skills development, with the exception of one teacher who had bushcraft skills and another in training to be a FSL. Shelter and den building during free play are often used by the children as ways to practice these tool skills.

Games varied between energetic warm-up type activity and stealthy, stalking, trust-building and listening games. Most were games that could not be played out as completely in settings such as school yards or even parkland. Laura always engages fully in the games as a participant and encourages the other adults to participate as well. This is in contrast to the classroom setting, where staffing levels and the dominant culture do not permit such participation by teachers. Games and stories almost always have a nature-based theme. Stories use animal sounds and movements and often begin with a question, for example, who owns that (pointing to the heap of cones and conkers)? Or, who would be out at six o'clock in the morning?

5.3.5 South-west Routine Five: Sharing Food

Being in nature seems to stimulate appetites. Lunchtime is a highlight each week partly because of the hot drinks and shared snacks provided by Laura. Each brings their own lunchbox as well. Most of the children relish their food in FS. The adults sit in the communal circle and share the drinks and snacks provided by Laura. Lunchtime in FS is very different from lunchtime in the classroom. Children and adults do not eat together in the regular classroom and do not sit at the same table. Lots of conversations happen at the same time. People move around. Often the lunch chat is one great group chat, where conversation happens not just with those in close proximity, as it is often the case in the classroom, but involves everyone. Children play with their food; I observed one child entertain the rest on a few occasions by eating the sweet and savoury food together, for example. The FSL often uses this time to informally ask both the children and the adults how they found the activities that day or to pass around a book or resource related to the main activity. On the last week, there is always a celebration, which has become a FS tradition in Bay School. Laura brings a large tube of whipped cream for the hot chocolate. If they want cream, the FSL squirts cream directly into their mouths or into the hot chocolate or onto the biscuit, whichever they prefer. There is great excitement as they watch each other making their choices. See Figure 23, Lunch.

Figure 23

Lunch



5.3.6 South-west/West Routine Six: Diary Time

Journaling in FS and in nature-based activities more generally is seen as a way of learning to pay attention and to keep a consistent record over time. It is an essential resource for the naturalist. To my knowledge, Bay School is unique in Irish FS provision in including this routine in their practice. This habit is established in FS in Bay School using the FS diary. Each child has a FS diary in which they write freely each week about their experience of the session. Starting each entry with the date on a new page is always requested. See Figure 24, Diaries. These diaries are given out in the first FS session attended by the children in the senior infant class. They are used throughout the FS sessions and retained until the children are in their final year in the school, when they are returned as part of the end of primary school ‘graduation’ ceremonies. They have become iconic records for the children of their FS experience. Most weeks, as they finish their lunch, they take out their diaries, in their own time. Laura highlights the importance of recording what they learned and what they enjoyed. She reminds them regularly that she is not worried about spellings or about tidiness. She often says ‘*we can ask you if we don’t understand something*’. However, she

emphasises that she expects a certain standard for their age. The other staff participate in supporting the children's writing, although mostly they use this time to complete their own observations of the children. Again, this routine contrasts with the norms of writing in the classroom. The children crouch on the ground, balancing their diaries on their knees, or on a log. Some wear gloves. All use felt tipped markers on paper that is sometimes wet or stained or torn.

Figure 24

Diaries



The children often work in pairs or small groups of friends, clustered together, looking at each other's work as they write and draw. Often, they refer back to previous pages, prompting reminiscences, chat and laughter.

5.3.7 West Routine Seven: Free play

Diary-writing gradually moves from writing to free play. Some children rush to complete diary-writing so that they can begin their free play time. There is always disappointment if for any reason free play is cut short. It usually involves lots of running and activity and laughter. The children often engage in a version of the games

or activities more formally participated in earlier on, or in previous sessions. The children spend lots of time organising and sharing out responsibilities for activities and adapting rules of games. Indeed, this process *is* the play. Often, children used the tools or asked for the ropes during this time. This was often a time when individual children practiced the tool and rope skills. Den building, chasing games, mock fights, sometimes verging on very physical and rough behaviour, as well as quieter activities, all happened at this time. See Figure 25, Camouflage. Mostly, the children formed into two or three large groups during free play. Free play sometimes led to disputes between the children, which were mostly, but not always, resolved without adult intervention. Laura usually used this time to observe and the other staff took a more active role in keeping an eye on the activities of the children.

Figure 25

Camouflage



5.3.8 West / North-west Routine Eight: The Closing Circle

Like the opening circle, the closing of the session is marked by the group coming together to reflect on the session and to give gratitude. See Figure 26, Gratitude. Usually, everyone, including the adults, was asked to contribute a ‘golden’ moment from the day. This was led by the teacher present in almost all the sessions. One week,

the teacher led the group in the composition of a song. At the end of each verse each person added in their golden moment in song. Another time, the session finished around a huge leaf pile built by the children during free play. The group measured the height of the pile using their hands. At the request of a child, Laura checked on her phone regarding whether the Guinness Book of Records included leaf piles. The final session finished with an extended celebratory gratitude to nature for the gifts of the forest and for each other.

Figure 26

Gratitude



The Journey Back to the Classroom. The mood often changes at this point as everyone gets ready to go back to the school building. Volunteers are scarce for jobs. Laura says: ‘*Well, if nobody is willing to carry the stuff then we don’t bring it in future*’ and usually some of the children offer to take the rucksacks. We leave the forest at about 11.45 am most weeks. Often, Laura asks those who did not get to pick partners earlier in the day to do so now. Sometimes there are complaints of feeling tired from the children as we journey back to the school.

On arrival back at the school, the children remove their boots in the hallway and change into clean socks and shoes. In contrast to FS, there is a sense of rushing to meet a deadline at this point each week. All of the adult voices are urgent, including Laura's, as they direct the children to tidy up and get organised quickly. All high-visibility jackets, gloves, diaries and bags are tidied away. The children remove their waterproofs and put them in their FS bags. They gather up their schoolbags and line up. Nearly every week, one or two children hang back and take as long as possible to find socks and sort shoes. The teachers often use this time to finish off their observation sheets. The third staff member usually brings the children back to their classroom before the school breaks for playtime at 12.20 pm. The staff meet for a short review at this time (discussed in the next chapter). The various notes and observation sheets are collected by Laura. She retains them until the end of the sessions when they are given to the principal.

5.4 Pedagogical Practices

The previous narrative described the core temporal routines of the FS session in Bay School. These temporal routines interact with a set of pedagogical practices that describe the approach to pedagogy and praxis in FS in Bay School.

5.4.1 Practice One: Being with(in) Nature

Stewardship of the natural world and nature as co-teacher are two key aspects of this norm. Laura emphasises consistently the responsibility of the group to care for the forest. This includes removing litter, being aware of how and where we move, and the impact of the human presence on nature. She explains the Leave No Trace philosophy²⁸. She takes a bowsaw and reminds them that we do not cut down living trees without thinking about why this is being done. We do not kill living things. She points out a path which has begun to be made by the group and this leads to a discussion of how paths are formed. Early in the series of sessions Laura encourages the children to walk gently through FS and notice plants that are trying to become established and grow. Children are respectful and receptive to this kind of understanding. That does not stop them racing about or using sticks as weapons at other times.

²⁸ Leave No Trace Ireland provides research, education and outreach so every person who ventures outside can protect and enjoy the outdoor responsibly. See <https://www.leavenotraceireland.org/>

Activities like adopt a tree, sit spots and making tree spirits, support this kind of learning. For the Robin's class, this was their third term in FS. They were at this stage very familiar with the trees they had adopted the previous year. This is a regular activity during the first weeks in FS. Each child selects a tree that is meaningful to them. They keep that tree and over the various sessions work with her to complete different activities. For example, they might make a tree spirit as part of nature art to look after their tree. They may use it during their sit spot.

Revisiting his tree for the first time in eight months, I observed one nine year old child for over a minute standing close to his tree and saying, *'my tree, my tree, my tree'*. I observed that for many of the children in the Robin's class, this is an intense relationship. I wrote: *'They all seem to remember their tree, and they're calling to each other from their trees. They're hugging their trees and sitting down against them and happy to see them. I hear children calling out' what's yours called? Mine is called Bob'*. The talk one week was about satyrs, the woodland creatures who fell in love with the trees.

Over time there is increasing awareness of the lifeforces of the forest. One week there was great joy when two snails were observed in a tiny den two children had built. The park ranger visited on another occasion to show the children ravens high in the Scots pines. We listened for a raven call. *'He's telling all the birds that we are in the forest'*, says the park ranger. Ivy, often viewed negatively, is seen as a positive in FS, plentiful and available as cordage (string). On one occasion, a child slipped down a bank where there was a lot of glass and bottles. *'I grabbed on to a piece of ivy and that's what held me up. Thank you, ivy'* I overheard her say. Usually, the site provided most of the materials used in the sessions. When Laura brought non-natural materials (such as clay for tree spirit art, or small puppets for drama in the woods), these were used sparingly. The general rule was that we should leave the materials of the forest in the forest. Children were not encouraged to bring nature artefacts out of the forest.

I noticed the children picked fallen leaves on our way to the forest during autumn. One described the maple leaves as like *'flames of a fire'*. Another brought the leaves he collected on the journey to FS to decorate his den. A child was looking up at the tree canopy and said to no one in particular: *'Look at that, it's beautiful. The sunlight is shining through.'* It was about six weeks into the series of sessions. It was the first time I heard a child comment on the beauty of the forest.

FS is about spending an extended period of time with(in) nature across the seasons and is seldom cancelled due to adverse weather. The exception is wind, due to the risk falling branches pose for those in woodlands. The importance of good quality waterproof leggings and jackets, lots of warm layers of clothing, suitable footwear and a waterproof bag in FS is non-negotiable for both adults and children. A substantial lunch break and hot drinks are also really important on such days. Thus, risk is mitigated, basic needs are met and nature pedagogy in FS can be more fully enacted.

Nature also challenged us on ‘bad’ weather days. We experienced all types of weather during the various sessions, including some very wet, cold days when the ground underfoot became very muddy and slippery. Days like this promoted lots of physical play for the children. On one such day, one passage from my field notes read:

Five boys had found a long stick and were using the grassy area for javelin throwing. They lined themselves up into a queue to take turns. All have red, rosy cheeks. It's very physical play. They are shrieking and laughing. They appear oblivious to the rain. Close by, another group of four are having a leaf fight, and are getting very wet and dirty as they aim fistfuls of dirty leaves at each other and mock wrestle.

Putting up the tarpaulin for shelter was a key task for Laura on these kinds of days. Usually, a group of the children enjoy helping with this task. While crowding together under the tarpaulin sharing hot drinks was mostly enjoyed, sometimes the mood was different. The tarpaulin could be very cramped, children were unwilling to sit near the edge and everyone became a little fractious. Such opportunities for physical activity and for becoming aware of the impact of feeling wet and cold on mood highlights opportunities to build resilience and tolerance for difficult situations in nature, for adults and children. It also highlighted the importance of wearing the proper clothing and footwear in order to facilitate this kind of embodied interaction in the natural space.

5.4.2 Practice Two: Curriculum

Curriculum and curriculum delivery in FS in Bay School are interpreted as broad terms to do with holistic, learner-centred approaches to teaching and learning. This view is aligned with a Deweyan perspective of curriculum as mutually constructed experiences which start with the learner. This means that reflective practice, process, and holistic, experiential learning is prioritised. Observation and self and peer assessment are used as markers of progression. This broad understanding of curriculum is facilitated in FS by the high adult to child ratios and by the affordance of the natural environment. The emphasis on process in FS enables reflective discussion by the

children on their learning and supports explicit self-assessment and peer-assessment. This extract from my field notes describes how the children were encouraged to reflect on their learning in a drama activity:

Laura splits the group of 15 into two groups of seven and eight and invites the children to compose and perform a drama, one group on the theme of woodland creatures and the other on the theme of the zoo. When we have watched the play, Laura invites comments from the performers about the process of composing and dramatising it. She then invites the audience, including the staff, to act as critics. She encouraged positive comments as well as negative. Following this the FSL debriefs with the performers. One child replied 'Usually when I'm in a group, nobody listens to me. But today, everybody listened'. Another said that at the beginning, their play was two peoples' ideas, but as they developed it, more and more peoples' ideas were included, and that made a better play. The process of putting together the play and the critique following the play were of equal priority to the play itself. Whereas quite often in classrooms, the product (the play in this case) is the end point of the learning. Over an hour was spent on this activity, with the play itself (the product) taking just a few minutes.

Diary-writing in FS also supports this kind of reflection and in turn self and peer assessment. During the first weeks, the Owls children spent a long time looking back over their writing from two years previously, as this vignette illustrates:

Anna: I can't even read my diary [giggles].

May: Me neither [reads from diary and pronounces phonetically] Week one bondtease. That's for boundaries.

Anna: Look, Miss Forty [laughter as she realises it spells the number forty instead of the teachers correct name] was teaching us.

Raft making using sticks and ivy, followed by taking the rafts to the fountains in the park to see if they will float or sink, is another regular and popular activity in FS in Bay School. The approach used in this regular task demonstrates the holistic approach to curriculum implementation in FS. It also demonstrates opportunities to exercise autonomy and choice, including the choice to withdraw from the activity altogether, as two children did. This is an edited extract from my fieldnotes:

Laura set out the activity by offering the children a choice to make their rafts alone or in pairs. She reminds them that if they work in pairs, then they will just have one raft to float. In order to make their raft, they must make or find approximately ten similarly sized sticks, some ivy and materials to decorate their raft. Two children drift away and take out the litter pickers to remove litter from the FS site. The rest of the group seem to be really enjoying cutting and whittling their sticks to size. The children are familiar with the idea of stripping ivy in order to use it as string or cordage. Laura is now wrapping and knotting the ivy to bring her own raft together. She's invited anyone who's not sure to watch her, modelling the appropriate techniques. There is an atmosphere of great concentration. After about 20 minutes, Laura suggests that everyone try to float their raft. We leave the FS site and walk down into the fountains in the

main park. There is great discussion and comparison between the children as they see each other's work properly for the first time. Laura invites them to name their boat as she takes photographs and they shout out lots of names: Titanic, Scorpion, Squirty, Meet my Machine. Laura asks them to think about whether their raft will sail. There is great excitement when some of them float. Laura has a long stick and uses it to make waves in the water, to the squeals and delight of everyone. There is lots of shouted chat and discussion about the relative merit of the different rafts. There's a reluctance in some children to let their boats go. Some of them make the decision to leave them on the water and then regret their decision and race back.

There was huge enjoyment experienced by the children during tasks like this and a great atmosphere of enthusiasm for learning, associated with this kind of engagement. As the fieldnotes mention, one pair of children move away from the raft building to complete another task. At one level, this can be seen as exiting from the 'learning' and oftentimes that may be true. It really made me think about what is meant by extending choice to children in the pedagogical context. Does that choice include the freedom to abandon an activity, or to change my mind half way through and re-join the activity? On another occasion, for example, Laura invited the children to adopt a tree during their first weeks in site two. They were familiar with this kind of activity from their previous experience in FS. As preparation for getting to know their trees better, Laura asked everyone to stand tall and closely together like the trees in a forest.

I noticed that a few children have seemingly withdrawn from the activity and were sitting, chatting quietly, nearby. I was sitting close to them and overheard these children describing their trees to each other and making the tree shapes with their sitting bodies. They were also using their fingers to represent trees in a forest. This vignette highlighted for me that engagement in learning comes in many forms. It might appear that these three children were not engaged, but my observations clearly indicated the contrary. It highlighted for me the importance of remembering that engagement in learning may not always be explicit or obvious.

5.4.3 Practice Three: The Teacher

The didactic role. During the FS session itself, the role of 'teacher' is experienced in a number of ways. In contrast to the classroom, there is a seeming 'absence' of the teacher in a didactic or formal teacher role in the FS sessions. In part this is accounted by the facilitation of the sessions by Laura. In Bay School, the teacher who attends FS is 'in charge' - for example, if the teacher was unhappy about a safety issue or had concerns about the weather, she can take the children back to the school. This is long-standing and clearly understood policy in the school and was mentioned on

a number of occasions during the sessions I observed. This more ‘didactic’ role is manifest in the monitoring role the teacher plays in the sessions. The teacher often shared his or her knowledge and experience of individual children from the indoor classroom with Laura. While this is mostly a collaborative sharing, there were occasions, particularly regarding behavioural incidents, where it felt that the teacher was ‘warning’ Laura towards a more didactic approach. In the monitoring of the diary-writing activities during the FS sessions, I observed that the teacher was more likely to be in this ‘didactic’ role, for example by encouraging the children to write more fully about a topic, or to make sure that an adult sees their journal before it is put away or requesting that the children take more care with their writing.

However, this role (the teacher as ‘traditional’ teacher) was not always successful in FS. On one occasion, for example, a teacher led the shelter building activity in the absence of the FSL. There was a lot of restlessness as the children listened to a teacher-led introduction to the activity. In my field notes, I wrote: *‘it felt like the children had lots of ideas to contribute and an expectation in the forest setting of a different approach that led to this restlessness.’* In contrast, the following day, a different teacher, who is also a trained FSL, approached the same task saying *‘Let’s look in Jerry [the trolley] and see what we have. Tarps [tarpaulins] – what can we do with those?’* Someone shouted *‘Make shelters’* and that was the catalyst for her to say *‘So great, what else would we need?’* As they set off on the task, the FSL shouted out *‘We are available to help if you need’*. The two approaches contrasted sharply for me and also highlighted for me the importance of specific training in FS approaches to pedagogy.

Another example concerned a plan that the teacher present would lead a story or poem each week to enable the FSL to observe the group. Despite being planned for, after the first week, this did not happen. This was partly due to time pressures; however, it may also have been about teacher confidence in the FS setting. There was resistance displayed by the children during the first week to the more orthodox adult to child interaction expected by this teacher, to do with everyone sitting and listening to the poem she had chosen to read. This example is discussed more fully in section 6.6.2 in chapter six.

Teacher as observer. In Bay School, the teachers describe their role in FS as that of the observer. The high adult to child ratios and the facilitation of the FSL enables the teacher to concentrate fully on observing the children interacting with their

peers in a more naturalistic setting than the classroom and potentially use that information to personalise learning more fully for that child. However, this observing role was understood to different degrees by different teachers and was a source of tension regarding when and how to intervene in children's activity in FS (See chapter seven). Teachers seemed to interpret observation as a passive, 'backseat' role, in direct contrast to their role in the classroom. They often enacted this role of observer as a passive surveillance, watching for 'bad' things to happen or for misbehaviour to occur, rather than for 'catching' learning opportunities. It also led teachers to be unsure regarding responding to children's requests, for example, asking to go outside the boundary. There was a sense that being learner-centred meant 'anything goes'.

For Laura, being observant was enacted in a much more active way. It was about being present and alert, based on a belief that children have the tools within themselves to find solutions and will seek out adult support as needed. It was also about being alert to risk and knowing the 'right' moment to intervene to keep everyone safe. Laura was very upfront and direct with the children on occasion if she felt this was warranted, especially around the use of tools or risk, or responding to calls, for example. I wondered if in part this was due to her background in early years education? Or was it her FS training and extensive experience of delivering FS in Bay School?

Teacher as participant. FS offered teachers a chance to fully participate as learners alongside the children and the other adults. This happens in an organic way, for example, learning to whittle, or to make knots, or to try out tools. On other occasions, Laura explicitly invites everyone to participate in an activity. I wrote in my notes:

Today, everyone was asked to explain the inspiration for their nature art. I think that was very powerful for the children to see the adults take part. I noticed that for Paul (pseudonym), seeing the adults come up with a piece of art seemed somehow to encourage him. I think it also helps you as an adult to see what it's like to be put on the spot, to come up with a response to creating something.

Everyone participated in the closing and opening circles, in sharing gratitude, in singing, in sit spots and meditation. Teachers sat into the circle, sharing the utensils and food at lunchtime. They shared the challenges of feeling cold and wet and managing risks. The staff seem able to relax in FS, in the presence of the children and their colleagues and this seemed to enable them to expand their identity as a teacher. Teachers demonstrated more openness to sharing their role with nature, over time. They also seemed more comfortable with 'revealing' themselves as vulnerable in FS, to a

greater degree than in the classroom setting. This perspective enables the teacher to be seen as a learner in a way that does not conflict with also being a teacher. Some teachers found this easier than others.

5.4.5 Practice Four: Communication

The different norms regarding communication in the FS setting, compared to the indoor classroom, are striking. Talking, moving, transitions and choices all speak to a learning place in which there is greater freedom of expression for each person. The demarcations of subjects, of time, of adults and children, of roles, is more nuanced in the woods. In the woods, mostly, there is an absence of the normative communication familiar in the indoor classroom setting.

Talk. There were few hands up or permissions sought to speak in FS. The informality and the richness of children's speech was very noticeable. In the woods, calling out and boisterous verbal interaction was the norm. I became very aware of the cadences and rhythms of children's speech and how they moved their bodies as they spoke. They use lots of sounds and squeaks and shrieks as well as words to communicate. I wondered if they are suppressing all of this 'ordinary' communicative energy in the indoor classroom, where permission must be granted, usually from an adult, to communicate, with the exception of yard time. I wrote one day: *'When do children get opportunities to experience sustained conversations during the formal school day, for extended periods of time?'* I observed one child singing loudly on numerous occasions in the woods and nobody commented. Yet this same behaviour was a cause of constant stress in the classroom, according to his teacher. Silence was also used to communicate in the woods and it was notable how children, and adults, respected those who wanted quiet time.

Movement. The space available in FS is much larger than the regular classroom. The hillocks and rough terrain, trees and bushes, shelters and dens provided lots of opportunities for movement, lying down, crawling, standing up, turning round, racing about, hunching down and spending periods out of sight. Pine cones, acorns, conkers, sticks and leaves and seeds and other loose materials from the forest floor were used as camouflage, as hiding places and as challenges. This vignette describes the scene one day:

One child has taken out his diary to write...he is looking back at what he did previously. The children have dispersed. Two adults are near base camp, talking. There are about six children working individually with the tools. One child is gathering cones to make nature-art. Further away almost out of sight,

there's a group of seven boys gathering sticks and setting out a little territory for themselves, completely out of sight of the main base camp.

The level of free movement and physical activity which I witnessed regularly in FS was in stark contrast to the opportunities available in the indoor classroom. There were abundant opportunities for movement and physicality in FS. This second vignette describes another day:

Some of the girls have organised a chasing game. Two are taking photos. The boys, I think, are wrestling and playing games. I can't see them but I can hear them. I walk towards the area where the wrestling is happening. Three of the girls have begun to take part in the wrestling game now. They appear to be really enjoying the rough and tumble of it. Laura is playing chasing with three other girls. The girls with the camera are now considering joining the wrestling. One says 'I'll be ambulance services'. It then turns into boys versus girls. It is very rough but all are coping well. The 'less tough' boys are also getting involved.

Being in nature facilitates embodied activity. I wrote one day:

I am asking myself what are you learning from a leaf fight? You learn that you slip on damp ground. You're learning that it hurts if somebody shoves leaves in your face. You're keeping fit cause you're running; you're laughing, you're alert, you're learning to manage your body in space.

Transitions. The organic nature of the way the routines of the day emerge seems somehow to give everyone the right amount of time that they need for an activity. This vignette describes how the routine of free play emerged:

The children show their diaries to Laura as they finish their writing. Gradually a hum of noise gets louder as more complete the diary-writing. On occasion, the attention of those still writing is being drawn to others who have started to play chasing or are trying to agree the rules for whatever they wish to do. But then they turn back and start writing again. As they finish children seem to join easily into the free play activities. Laura and the teacher have set up a rope, which seems to have just happened kind of organically. They had been chatting about setting up the swing next week. About half the children are playing a chasing game and the other half are enjoying playing on the rope and really having fun.

The extended period of time in FS seems to facilitate this kind of organic approach to transitions. Children can also move away to find a quite contemplative space to learn or rest. During activities, children often stop and wander for a few minutes. They have a chat, look around, look at others and then come back to their task.

Time. In contrast, time always becomes a pressure at the end of the session each week when we must leave FS to get back to the school for the official lunch-break. One teacher came up to me one day as we watched the children. She said that she had learnt from FS to 'hold back more'. She mentioned how often she gave a 'hint' of the solution

to a learning task in the classroom, in part to keep things moving and get through the lesson ‘*in time*’. The length of time in FS facilitated this to happen more easily in the woods. The extended period of time in FS was also helpful in managing behaviour issues. Having more time and space often enabled solutions to be found by the children, without adult help and before the issue escalated to something much bigger. This is discussed in greater detail in chapter seven.

5.4.6 Practice Five: Planning, Review and Reflection

There is a high level of planning, preparation, review and reflection associated with FS in Bay School. Non-pupil contact time is made available by the principal to support this process. Prior to the start of FS for each participating class, each year, the principal of Bay School convenes a planning meeting with the relevant staff, including the FSL, during regular planning time in the school. This is an opportunity for the ‘team’ to get to know each other, to agree priorities for the sessions, and to share information about the children with the FSL. The staff also plan the ‘in-class’ arrangements²⁹. The staff involved prepare the agreed planning, observation and assessment schedules and make the relevant organisational arrangements for FS (agreeing dates, supervision, informing parents of the requirements etc). Appendix U, FS Curriculum Plan Robins, describes in summary the agreed plan for the Robins class. Appendix V, Curriculum Linkage and FS Plan, Owls, describes the plan for the Owls class.

The teachers also complete an information sheet for the purpose of ‘baseline’ assessment of each child prior to FS. A similar sheet completed following the series of sessions. See Appendix W, FS Child Assessment Sheet (Pre and Post). The class teacher and the resource teacher organise the class into two groups for FS, taking into account any special educational or health needs, gender, friendship patterns and behavioural concerns. During the FS sessions, the teachers used an observation schedule to record their observations of individual children during FS. See Appendix X, Teacher FS Observation and Assessment Schedule. Laura, the FSL, has her own set of planning and assessment forms. See Appendix Y, FSL Risk Assessment and Review Schedule. These comprise a risk assessment sheet and a session review sheet, closely aligned to the format provided by the training organisation with whom she trained.

²⁹ In Bay School the class are split in two on FS days. Half go to their regular classroom, where a programme of activities is organised that can benefit from the smaller class size. This aspect of the day is not the focus of this study.

A ten minute review meeting took place following each session in the forest, attended by the staff who were in FS that day. The class teacher attended too, where possible, even if she or he had not been in FS that day. Following the completion of the series of FS sessions, a review and reflection sheet is completed by all the staff and collated by the principal. This information is discussed in Chapter 6. Parents also complete a form about their own child prior to and following the series of sessions. See Appendix O. This is also discussed in Chapter 6. All the documentation is collated by the FSL and given to the principal as part of the planning and assessment for the class. This suite of templates and the time made available for their completion, as well as time for in-person review and reflection illustrates the high levels of planning, review and reflection associated with FS in Bay School.

5.5 Conclusion

This chapter has described the temporal routines and the pedagogical practices of the FS sessions based on my field notes as participant observer during the 22 sessions that I observed during the period of the study. This description is important as this is one of the first studies of FS in the Irish context and so this helps us to understand the kind of pedagogical experience that FS comprises for these participants, adults and children.

Each session takes place over four hours and begins and ends in the school. Those four hours are quite different to the regular day in school for those taking part. The temporal routines and the pedagogical practices associated with FS are established in the school as the children meet in a room with no desks and chairs or schoolbags. There is a smaller group of children, usually half the regular class (approximately 15) and always two and usually three adults. Most of the time is spent outdoors in outdoor clothing without the usual cultural artefacts of ‘school’ including bells, breaks, subjects and timetables. Curriculum content is associated with lived experience and experiential learning in nature, using nature-based themes. Curriculum delivery is cross-curricular and integrated. Mostly natural resources were used to support curriculum delivery and non-natural resources were used sparingly. Diary writing was a unique part of the FS provision in FS. Although the temporal routines and pedagogical practices were faithfully followed each week, thematic content often moved away from the planned activities.

There is an organic quality to the FS session that is largely in tune with the ‘right’ amount of time for individual children. Communication in FS is more

naturalistic, embodied and democratic than in the classroom. Similarly, transitions between routines in FS are more individualised and seem to make available the right amount of time to more participants, more often than not. The adults participate in the activities, for example in sharing lunch, in sitting into the circle, in sharing gratitude and golden moments, in learning. This democratisation seemed to help to build community between everyone.

Different types of engagement are enabled in FS; time to be alone and to be reflective, to be in groups and pairs and to be together as a whole group. The kinds of activities often depended on the weather. Cold days often meant lots of active games; wet days meant sheltering closely together; warm days were associated with relaxation and slowing down. I was very aware of an air of enjoyment and happiness associated with FS and a sense of being able to express yourself, to be less inhibited. This extended to feeling sad or quiet. There is a freedom to move, to sit, to stand, to be, which is not usually available to children in the indoor classroom.

The role of the teacher in FS is associated with observation of the children and participation in the activities, in contrast to the more didactic role played in the classroom. Observing was an opportunity for teachers to watch the children participate in the activities and rituals of the session, to observe the approach of the FSL and to reflect. Observing was also interpreted as a monitoring role, a type of surveillance. In contrast to the indoor classroom, teachers were encouraged by the FSL to participate in the activities and most of them did.

There is a high level of planning, review and reflection associated with FS in Bay School. Extensive documentary resources are prepared to support the FS sessions. However, there is little reference to these documents during the session and often, the session proceeds differently to what was planned. This is not a surprise and seldom commented upon. One could conclude that it is the process of review and reflection that contributes the ‘value’ of this planning, not the written documents, the products.

Without question, it is the leadership of the FSL, together with the openness of Bay School to this kind of pedagogy and, above all, the forest as the primary site of learning which underpin the routines and practices described in this chapter.

Chapter 6: Findings

Voices from Bay School

‘When you hear the words forest school you probably think of a desk in the middle of the forest with all your books and your pencil case...But that’s not how it works’ (Adam, child).

6.1 Introduction

This chapter gives voice to the staff, the children, and their parents, and presents their understanding and experience of participating in FS. Chapter six, together with the previous chapter, responds to research question one regarding the experience and understanding of FS in Bay School. The voices of the staff, the children and their parents are presented in turn. The voices of the staff are pre-eminent in this analysis.

The analysis of the staff voices is based on the transcripts of four, hour long focus groups, specific to the study; 21 ten minute staff review meetings, part of the usual work of the school; 18 one page individual staff review sheets and six one page review and reflection sheets, part of the usual work of the school, completed by individual staff.

The analysis of the childrens’ voices is based on two 45 minute focus groups, specific to the study, one before and one after the series of FS sessions with eight children; written activities completed in class by these children during the final week of FS in November 2019, part of the usual work of the school and a completed activity pack returned by ten children from Owls class in June 2020, specific to the study.

All parents and guardians of the children participating in FS complete a sheet about their own child, before and after the series of FS sessions, as part of the usual work of the school³⁰. The analysis of parents’ views reported in this chapter is based on twenty two responses from a sample of 16 parents to two questions on this sheet.

6.2 Staff Voices

Nine staff comprised the FS team in Bay School during the period of the study. These were: John (teacher), Ann (teacher), Kate (teacher), Jean (teacher), Sally (teacher), Mary (teacher), Eva (teacher), Clare (principal) and Laura (FSL). Three of these staff members, Clare, Jean and Sally did not participate in the FS sessions³¹. In this analysis, the term ‘staff’ includes the FSL. The terms ‘staff’ and ‘adults’ are used

³⁰ In the Owls class, due to the Covid-19 school closures, only the pre-forms were available.

³¹ Jean was going on maternity leave; Sally was a substitute teacher and Clare was the principal.

interchangeably in this chapter. When the term ‘teachers’ is used, this does not include the FSL. Four main interlinked themes emerged from this analysis, associated with Being in Nature; Intentions; Curriculum and Pedagogy and Teacher Identity. A fifth minor theme is Resources. These findings will now be presented in turn.

6.3 Theme One: Being with(in) Nature

Eight out of nine members of the FS staff participated in at least one of the focus groups³². All eight were in agreement about the importance of having opportunities to learn in the natural environment, both within formal schooling and as part of children’s life outside school. This perspective is captured in these comments from two of the teachers, Eva and Jean. Eva wrote:

It is vital children be afforded opportunities to be in nature and appreciate its value. This will afford them insights into biodiversity and the interplay between humans and the world around us, and also the negative impacts humans might have on nature.

Jean described participation in FS as: ‘an opportunity ...to establish a relationship between the child and nature, which will benefit them for life’. While this understanding predated the Covid-19 pandemic, for the four participants in the Owls reflection focus group (Clare, Eva, Mary and Laura), it was a view enhanced, both at a personal and on a professional level, in light of Covid-19. Mary (teacher) said:

Well, I think one thing Covid-19 has taught families like mine with young children in particular is, you know, there's no need to be rushing around at half five in the evening to that piano class; [instead] to create more family time, outdoor time and time to just be.

All nine staff were in agreement that these views were shared by the parent body and the wider school community in Bay School. Eva (teacher) described FS as already having a ‘lot of support among the parent body’. Clare (principal) said:

I think we are ahead of the curve on this... I feel outdoor learning will continue to play a much more central role in primary education going forward. I would love to have the capacity to run FS more. The willingness is there from the parents.

This opinion was borne out in views of the parents and the children reported later in this chapter.

6.3.1 FS is Restorative

All five teachers who participated in the FS sessions during the period of the study described their participation in FS as relaxing, enjoyable and restorative for them

³² Sally was the exception.

as adults. When asked to respond to the question ‘how was FS for you today’ on the session review sheet, all eighteen responses were positive. Twelve responses described FS as ‘relaxed’ or ‘really enjoyable’; other terms used included ‘great’, ‘excellent’ and ‘good’. Mary (teacher) said: ‘Beautiful morning, fresh air, birdsong. Excitement and joy of kids was infectious’. Eighteen written comments describing their ‘golden moments’ from the sessions echoed this high level of satisfaction. Ann (teacher) wrote:

Very relaxed today. The children in the group are so in tune with the routine and comfortable with FS in its entire format. I'd had a hectic start to my day even before 8.30am but by the time we all returned I felt very refreshed from being outside.

Eva (teacher) said: ‘the good weather seemed to influence a relaxed mood among the whole group and created a lovely atmosphere in general’. Eva also described being called by her first name as part of the sense of relaxation for her.

The restorative impact of participating in FS for the teachers was mediated through the high adult to child ratio and the facilitation of the FSL, as well as the natural setting. Laura (FSL), in contrast, did not explicitly describe such feelings. Her role in facilitating the session may have affected the extent to which she could describe hers as a relaxed experience. That is not to say that she did not hold a similar view of nature as restorative.

One teacher, Mary, extended this sense of relaxation to her observations of one child, painting a stark contrast between the classroom and FS for this child:

He relaxed. Enjoying the freedom of it all. He finds the classroom extremely difficult. He's always up moving like constantly, you know, just can't, yeah, when's movement break? When's lunch? When's lunch over? So it was lovely to see him relaxed and free.

6.3.2 A Spiritual Connection with Nature for Children

For the six staff who participated in the FS sessions, witnessing childrens’ responses to nature was a very powerful experience. Nine out of eighteen responses to a question regarding their ‘golden moments’ recalled childrens’ responses to nature. This ranged from observing spontaneous unplanned activities, such as children jumping in puddles, getting splashed by the fountains or covered in mud or leaves, to observing children listening for birdsong and watching them caring for their trees.

Observing the spiritual nature of the relationship that the children formed with the natural environment, in particular trees, was a highlight for these adults. This recalls Rousseau (1762) and his understanding of the profound relationship that exists between children and the natural world. Mary (teacher) described: ‘Their little faces and their

freedom when they could run into the forest was magical'. One of the core activities in the FS sessions is 'Adopt a Tree' whereby children are encouraged to develop a relationship with a particular tree. The spiritual relationship the children demonstrated with the trees they 'adopted' was discussed by Kate (teacher), Laura (FSL) and Jean (teacher) in this excerpt from one of the final review sessions:

Kate: *So, you know, when we were all just leaving Ian went back up to his tree and was whispering, like I couldn't hear but his mouth was moving and he was talking, and I mean, his eyes were nearly closed. It was the deepest thing. Even though it was noisy and you were like we're lining up, we're lining up.*

Laura: *Like this is probably really meaningful for him?*

Jean: *He wrote that he really enjoys FS. And I think he feels that because he's a quiet boy, say in class, but when he's outdoors he just really gets engrossed and he probably feels that he is going to miss that.*

In the final week with the Robins class, Kate (teacher) and Laura (FSL) discussed the childrens' feelings of sadness that FS was 'over', even though the park in which FS takes place is just a short walk from the school and many of their homes. Kate said: *'they were devastated that was probably the last time they would kind of walk there and I was like, guys it is no distance from our school and most likely no distance from your house'*. This led both Kate and Laura to discuss the children's expressed feeling of 'place' in FS and how that could be extended to respect and care for other places, such as their classroom:

Laura: *So, I mean, even as a child and this hopefully when they grow as an adult with their own children, they go down there and they can explain that feeling of ownership of that wood. That's very powerful.*

Kate: *And the responsibility that brings, you know just at 2:10 pm [school closing time] to have a look around, like look around your classroom. This is your classroom where's the respect here and responsibility here for you [to leave the room in good condition]?*

6.3.3 Affordance of the Natural Environment ³³

FS is a larger, novel, more complex and resource rich pedagogical space, and place, than the indoor classroom. Managing transitions and behavioural incidents was especially impacted by these features of time and space in FS (McCree et al., 2018). These staff felt that FS provided opportunities for the children to explore different ways

³³ Affordance theory (Gibson, 1979) states that the world is perceived not only in terms of spatial relationships but also in terms of object possibilities for action (affordances), that is, perception drives action.

to manage their emotions and to try to find solutions to conflicts, in ways that enabled growth. This was associated with the affordance of the forest, allied to the adults' trust in the children to be able to come up with solutions, while remaining available should they be needed.

One very wet day, a child became upset before lunch and removed himself away from the shelter. This upset was due to an unresolved issue between this boy and a friend regarding an after-school activity they both attended. As free play began, his friends were encouraging him to join in with the group. He refused. Eventually, after much encouragement from one boy in particular, he began to slowly walk towards the group. This incident spanned over almost an hour. The adults in FS were aware of this ongoing issue and Laura (FSL) and John (teacher) discussed it, but did not intervene directly. At one point, Laura asked the group of boys had they come to a resolution; when she was told no, she said: *'well, maybe he needs more time'*. The opportunity to reflect on what might be going on for this child was explored at the review meeting following the session. The focus was on how the children themselves had sufficient time to resolve the issue successfully; in other words, the child re-joined the group and went back to class happily. The class teacher, Sally (who had not been in the woods that day) reported: *'He was one of the first who came up to me in really good form'*.

This focus on the resolution rather than the 'problem' seemed to be a feature of how such issues were managed in FS. On another occasion a child had an upset over partners and was very tearful and refused to leave the forest. While the rest of the adults and children began the journey back to the school, the FSL remained with the child who was upset. Laura (FSL) described the incident from this point to Eva, the class teacher, who had not been in the forest that day, but who attended the review meeting:

I said I just need you to cross the road. I don't need to hold your hand. I don't need anything. You can take your time but we have to cross the road. Eventually he crossed the road. I didn't speak to him at all. We just walked. Screaming along the street, people stopped and stared. I was just ahead [of the child] and I ignored it. Didn't say anything, just stood, waited [for the child to move nearer to her]. Then I kept walking. And he was screaming his head off. And he'd stop again.

By the time the group had returned to the school, the child had re-joined the group. For Laura (FSL) this was a successful outcome, associated with the child being able to regulate his emotions and choose a positive solution: *'Well, it was the way he came back and it resolved itself. It was a big moment. Big moment. Big. He came back and no*

one got on to him'. Mary (teacher) agreed: *'He came back safe. you know. Let's be honest'.*

The chance to discuss this incident as part of the review meeting following the session in FS was integral to its resolution for the staff. Mary (teacher), initially described the behaviour itself as *'outrageous'* and intimated that some kind of punishment was required. Laura was more sanguine: *'He just had a meltdown. And unfortunately, that was his way of dealing with that meltdown'*. Talking about the incident together helped these adults to see beyond the incident itself to the needs being expressed by the child. There was agreement that the incident had been resolved. The teacher agreed to let the child's parents know what had happened and that the incident was *'closed'*.

Similarly, during an incident where one group of children were disrupting the circle by flicking elastics and throwing sticks as other children told nature stories, being in FS seemed to facilitate the staff to ignore the behaviour and maintain *'teaching'* for the rest of the group; it also enabled the main protagonist to remove himself and potentially re-engage with the learning later on. The extent to which this situation could have been managed in a similar way in the classroom is moot. The priority to reflective practice in FS was also evident here, in this excerpt from the discussion between Mary (teacher) and Laura (FSL) regarding their different approaches to managing such incidents:

Mary: *It was huge learning for me just from watching it, like you were just, like, if you don't want to do it, you don't do it, whereas I'd be like...*

Laura: *I thought it was getting a bit disruptive... I was waiting for you [the teacher] to pipe up [laughter]*

Mary: *It's funny because I wrote about it. You know, the tendency, it's like to interfere, like to help them, you want to guide them, you know that it's natural [as a teacher] to want to control and guide... to see yourself and how comfortable or uncomfortable you are [with ignoring such behaviour] [laughter].*

6.4 Theme Two: Intentions

For all of these adults, FS provided a distinctive space for social and emotional development to a greater degree than the indoor classroom. This emerged in a discussion around the overall aims and intentions of the adults for the FS sessions. These adults saw FS as supporting social skills, such as acceptance of each other, being relaxed in each other's company, being open to positive interaction with teachers and

peers, building empathy, trust and compassion, broadening friendship groups and being 'less fixed' around partners. Just one staff member, Ann (teacher) described aims associated with nature connection. Ann saw FS as a way *'to encourage each child to be inquisitive about the natural world'* and *'to help each child feel a connection with nature'*.

6.4.1 How does FS support these intentions?

The six staff members who attended the planning focus groups were invited to write words and phrases associated with how FS supported these intentions. The anonymous responses were shared and discussed. In the discussion the staff expanded on their views as to why FS offered greater opportunities for social and emotional development than the classroom. These fell into four related categories: Grouping (the smaller group size and the high adult to child ratios); New Challenges (having freedom, feeling trusted, having choices); Setting (being in nature) and Pedagogy (self-directed learning).

The relaxation and informality offered by nature was central. Eva (teacher) described the children as being more comfortable outdoors:

Cos they could be themselves and they could relax. And they knew that we trusted them. Yes, there's more opportunities for teamwork and cooperation outside in an outdoor environment...there are opportunities also in the classroom, but children might be more comfortable in themselves in an outdoor environment, I think.

The inclusion of the journey to and from FS as a way for children to interact informally with each other and with the staff is an example of the less formal and more organic nature of interaction in FS. It too was part of the 'learning' in FS.

FS was viewed as enabling greater freedom and more opportunities for self-directed learning. Jean (teacher) said: *'they're not in a structured classroom that the teacher is saying this is what we're doing now'*. She went on to say that FS had an impact back in the classroom, enabling the children to be more *'motivated and confident in the classroom setting'*. For one child, Peter, who was new to the school, and for whom settling in was proving difficult, FS was seen as an ideal way for him to settle in, as this conversation between Laura (FSL) and Kate (teacher) demonstrates:

Laura: [The fact that FS happened in the first term] that was probably a good thing for Peter. While he's settling in there's an outlet for him.

Kate: And there's more of a leeway in the forest for him to express himself.

FS offered more choices. Eva (teacher) said: *'obviously, you know, we're the leaders, but they are making choices as well, there are more opportunities to do that in the outdoor*

setting'. Describing one child as *'oppositional for want of a better word'*, and *'defiant with teachers'*, the choices offered in FS was seen as both suiting (Eva) and challenging (Clare) this child. Clare said: *'he responds very well to knowing exactly what he can and can't do. It will be interesting to see does the freedom suit'*.

The opportunity to see the children in a different setting enabled these teachers to learn more about the way the children learned. Jean (teacher) described:

The effect on the child who might struggle academically but outdoors comes alive with interest and insight is so important and can genuinely change a child's outlook on school, their peers and most importantly themselves. For me as a teacher, what I've seen over the years is to see little kids that are so shy and so, you know, could be quiet in the classroom and lack a bit of confidence. And within the eight weeks, you know, they come out of themselves. Now, it might not always translate in the classroom... but at least you can see it is happening outside the classroom.

Mary described it as being about growth: *'you know, in that space of eight weeks, there is an opportunity to really grow'*.

Eva (teacher) struck a different note. She attributed success to the experience that Bay School had built up over time in FS and the expertise of Laura as much as anything else:

Yeah, transformative, really, but also, I think, kind of the expertise, you know, the fact that we've been doing this sort of thing [for some time] with Laura, it's very important to, you know, for the kids and the teacher that you that you're with somebody who just kind of knows what they're doing.

She concluded by saying that the one piece of advice she would give to other teachers was *'Just to trust Laura, she knows what she is doing'*[laughter].

6.5 Theme Three: Curriculum and Pedagogy

For these staff, pedagogy in FS was associated with an emergent approach to planning, was seen as highly integrated across, and effective in delivering, all areas of the curriculum, and was notable for its novel routines regarding 'classroom' management, transitions and assessment.

6.5.1 Emergent planning

These teachers seemed to be able to work back from holistic experiences in FS and match those to the more formal language of curriculum strands and units in the curriculum documents in their planning. The level of comfort with this however did vary from teacher to teacher. Jean (teacher) queried the need for aims and units and objectives at all. *'You just need to look at the plan and you're seeing what they're learning every day'*. This was a reference to the curriculum plans for FS, which are set

out in Appendix U and Appendix V. In contrast, the seeming lack of a plan was unsettling for Ann (teacher). She expressed concerns about how the learning matched curriculum objectives in this conversation with Laura (FSL):

Ann: There's no kind of targets or aims or anything. And even in the information that's sent, it's kind of like, I don't know, like do we have any aims or targets?

Laura: I don't think there's like targets or aims that you can put on it because you know, you're just watching each child to see how they progress in themselves.

Ann: But you see as a teacher you have a programme. You know, I don't really know what's going to happen each day.

Ann again expressed her views in the following vignette with Laura (FSL) and Jean (teacher). A raft building activity had led to a discussion of what learning outcomes were demonstrated in the activity. Jean, the class teacher, who had not been in the forest that day, had previous experience of FS for this age group and was familiar with the curriculum.

Laura: It was just interesting to see some kids actually measure the sticks... Then other children just kind of looked at the sticks and broke them [to the approximate size].

Ann: They really enjoyed it. But I was just wondering what was the learning?

Jean: Floating and sinking, more experiential. All the time they're measuring and they're you know, observing and questioning and they're learning their maths skills, drama and art, it's highly integrated.

Ann's was a minority view. Mostly, the teachers were open to an emergent approach to planning. Eva (teacher) wrote: *'It was great to have a plan for the day, but to also be open to change, as FS allows for discovery-based learning, and therefore an opportunity for the learning to be truly child-led.* For Kate (teacher) this approach to planning was facilitated by the small group size. Clare (principal) highlighted the reflection time back in the school as key.

Interestingly, in light of the collaborative nature of FS, the FSL usually made these planning decisions herself and then explained the decision afterwards. This may be because such decisions were almost always associated with weather or with the 'mood' that she sensed in the group that day. On one occasion she said: *'Yeah, I knew I wasn't going to be sticking with the plan 'cos I had to get the tarp up. So we kind of had to play it from there, you know'.* On another: *'I always kind of just go with the flow of things'.* For Laura (FSL) successful planning was also about children who did not wish to participate in a particular activity being able to exercise that choice.

6.5.2 Integration with Curriculum Delivery

These teachers saw FS as highly integrated with the subject areas of the curriculum. The examples given of curricular integration by the staff demonstrated a clear connection between FS and a broad range of curricular areas. For example, the class teacher described the following opportunities for integration for the Robin's class over the period of eight sessions:

SESE (tree week, tree planting and sustainability)
Ethical Education³⁴ (they're going to write to the company about the non-reusable straws on the milk we get)
English (oral language/writing reviews and reflections on FS),
SPHE
Visual arts (using natural materials), drama (showing the video made in the woods),
Science (designing and making).

Jean (teacher) described how she felt FS was integrated with the curriculum more generally:

Obvious curriculum links are SESE to do with plants and animals, environmental awareness, designing and making, my body; SPHE; PE, but also oral language, visual art, music (song singing and composition), maths (measures length, time, distance) ...it's highly integrated.

It was clear that Clare (principal) placed a high priority on ensuring that the FS sessions impacted on the in-class activities: *'There has been an ever-increasing effort to ensure the "forest" feeds back into the classroom this year and that I feel is vital that this is continued and built upon'*. The importance of the class teacher participating in the session review was seen as crucial to making this happen. All of the teachers endorsed this view. Jean (teacher) said: *'if there was any way that I could sit in on the reflection, that five minutes. I know it's a staffing thing again, but it would be great for me to hear what's gone on in the forest'*. This 'knowing' was about ensuring the class teacher knew about happenings in FS, as well about being informed to talk to parents about their children's experience in FS. However, it was also about sharing new insights into the children and sharing their own reaction to FS. Laura (FSL) described the connection with the school as very positive: *'I love that kind of connection'*.

Both Clare and Laura saw FS as facilitative of the different strengths of individual teachers. Clare said: *'So I think there's a different flavour depending on the personnel as well that are working with the FSL'*. Laura agreed: *'Everybody's different.*

³⁴ This refers to the programme developed by a patron to underpin the ethos of their schools.

they bring whatever they can’. The review sheets confirmed this. While all 15 responses regarding integrating the FS session back in the classroom were positive, different ways to integrate were described. Mary and Kate focussed on curricular areas such as writing poetry, tree week, art and craft using natural materials, science designing and making; For John and Eva, the main focus was on skills and ideas for listening, team building ideas and conflict resolution, based on activities and approaches used in the FS session. Kate described integration in terms of her own learning, and the impact on her identity as a teacher.

Bay School has prepared a document which they describe as ‘curriculum linkage’, in which the themes of the FS sessions are linked to the curriculum requirements for a class. Appendix V contains an example for the Owls class. However, it was noteworthy that apart from a brief reference in one of the reflection sheets, no reference was made to this document during any of the meetings or sessions that I attended.

6.5.3 Novel routines: Time

Novel pedagogical routines in FS include the length of the sessions, repeated visits over time and the use of calls and boundaries to manage transitions during the sessions. The sessions were not marked by the usual school breaks and different subject lessons. Further, all the group remained together on the FS site, albeit engaged in different activities. This is in contrast to the classroom where adults and children leave the room at different times for additional learning support, to carry out jobs or for the adults to attend to other duties. Kate (teacher) described this extended period of time together as really helpful:

Like you rarely would get that in a class where you have the full two hours for them to be interactive because it's all just shush, do this thing, we need to get this done, it's very choppy and changing, you know.

However, some of the teachers worried that the length of time spent in FS would impact on their ability to deliver the rest of the curriculum. This was especially true of beginning teachers and those new to participating in FS. Kate (teacher) describes her feelings during her first year in Bay School:

Like I remember thinking if I was told I was doing FS, I would honestly be panicking. I was panicking with the amount of stuff we even had to do in that time [without FS]. I think it all comes together in the end but you just at the start are very panicked.

Kate went on to describe how she felt the extended time for free play and informal activities facilitated the children's learning:

There's so much social skills they have to like [use]... If there's structure in a group you know, it's like you'd be the leader, you'd be this. So, there's very little room for argument. But [in FS] it allows for the personalities, and who's the real leader, who will take it on and kind of organise, who will step back and just be told what to say and what to do, you know.

Mary (teacher) agreed and highlighted the long-term aspect of FS as equally important:

Yeah, 'cos I was doing meditation and in the first week they were rolling around the floor and crawling and buck leaping across the place but by week 3 we had more structure. [laughter] But I was kind of allowing that because I was trying to picture over the eight weeks ...more letting go [laughter] but it was going to work. It was already starting to work.

In contrast to the teachers who valued the extended period of time in the woods, Laura (FSL) saw the time available for FS as limited. For Laura, this lack of time was associated with the fidelity of FS as a pedagogical approach: *'You know, the way I look at it is a pity you couldn't have a full day you know, because then the teacher can have time to reflect, not the rush that we always kind of seem to have'*. In line with the principles of FS being about repeated visits to the same place with the same group of people, Laura anticipated the increasing familiarity with the routines over time, would, in turn enable the children to engage in playful learning at a deeper level. She said: *'you don't really begin to get to know them until about third week in anyway'*.

6.5.4 Novel Routines: Boundaries and Calls

Boundaries and calls were described in the previous chapter as core routines in FS. The teachers seemed almost surprised at the high level of compliance with these rituals, compared to strategies used in the indoor environment for similar purposes. Kate (teacher) described not understanding the idea of boundaries when she first heard about them from a previous class who had participated in FS. She said that now understood that for these children, the boundaries were associated with keeping them safe: *'You know I get it now. They knew they were safe. I didn't, you know, I didn't realise'*. The high level of compliance may be to do with the children seeing a purpose to the request. This is discussed with reference to calls in FS in this short excerpt between Kate (teacher) and Laura (FSL):

Kate: You know the minute, the minute you called there the last day and they were all messing down at the leaves and wrestling each other and stuff like that, it was just finished, you know it didn't continue. Now I know once or twice there will be that little one or two; whereas on yard it would be different they wouldn't all freeze.

FSL: Yeah. I think cos we've made it from the beginning that it's important that nobody you know, it's very, very important. That it's for safety. We want you back for some reason.

6.5.5 Assessment and Progression

FS is a strengths-based approach to learning and so this emphasis on success and strengths influences the way in which FS is assessed in Bay School. The staff agreed that assessment in FS is different. It is less tangible and potentially conflicts with other methods of assessment, particularly formal standardised testing. Ann (teacher) said:

It's not kind of factual... in FS, it's all about observing, you know, your perception of how this child is getting on and another member of the FS group might think completely differently... one minute it's, you know, all this lovely FS and the next, ok let's get on with our Drumcondras' [standard tests in English reading and mathematics used in Irish schools]. Well, I mean, it is very much subjective.

This was a perspective shared by the principal, Clare:

It is hard to tangibly assess FS; however, I think through our reflection groups, observation forms and interactions with the children both pre and post FS we can gauge their development and progress over the weeks.

While the teachers completed observation sheets in some detail each week, these were seldom referred to in the review meetings. Eva (teacher) said: *'I found myself filling this out just to fill it out sometimes'*. Reading these sheets, the richness of some of the oral discussions was not evident. Their usefulness was questionable, beyond having a written record for each child; at the same time, completing these forms may have stimulated the discussion.

Marking progression in FS was not only about improvement, but also associated with noticing new information and insights about the children. Kate (teacher) described it thus: *Not only the 'I see an improvement in' but it's important to record like say, yes, this child who made a good idea in the team'*. Laura (FSL) agreed with this and went further, prioritising observation: *'Sometimes there might not be anything achievable, or maybe it's just that we haven't seen it yet. And sometimes maybe our expectations could be too high. I think observation is a big part. Using that as a way to gauge children'*. This lead Ann (teacher) to suggest that FS was more than a pedagogy, it was an ethos, which in turn impacted on assessment, particularly of individuals.

We shouldn't be so worried about assessment. Like, you know, if you're embracing an ethos, well, that's a belief in a way of being. And eventually that permeates everything. And that's what you want. So, yeah, I think we shouldn't be too hung up on assessment.

The degree to which this approach to assessment was relevant in the indoor classroom was not discussed.

6.6 Theme Four: Teacher Identity

Participating in FS fostered opportunities for the five teachers (Mary, Kate, Jean, Ann and John) to explore their professional identity by having opportunities in FS to act as observer, as participant, as collaborator and to compare that with the more didactic role more usually associated with the indoor classroom.

6.6.1 Teacher as Observer

While the teachers welcomed the opportunity to observe the children in FS, this also challenged them in different ways. Four of the five teachers who participated in the FS sessions described the role of ‘observer’ as a passive role, associated with a powerlessness and a loss of control. Mary and John described it as ‘*only observing*’, which may reflect a misunderstanding of the part that observation can play in pedagogy. Mary acknowledged how hard it was to ‘*give up control*’ as a teacher:

That's something that I'm would have found difficult about FS when we started ... the letting go, because you're in loco parentis, So, that's how you've been drilled into your head. And suddenly, you're just supposed to observe and, you know, teachers like control.

She went on to acknowledge how experience in FS helped this process: ‘*So, it's very hard. But I thought that [FS] was much easier this time because I was used to it.*’ For Mary and Eva, observing was seen as a kind of ‘ignoring’ of behaviour that in the indoor classroom would be commented upon or frowned upon by teachers. They worried that the children might try to use these behaviours in the indoor classroom where they would not be acceptable. The children might ‘abuse’ the freedoms of FS. Mary said:

I feel we have to be mindful here because we have them in the classroom between now and June. And we just have to be very mindful of that all the time, even though [the activity they were engaged in was amazing to see.

In contrast to Mary, Kate (teacher) found the opportunity to observe a powerful learning opportunity: ‘*Standing back and just watching them negotiate among themselves and being privy to that. It was a great privilege because often you're not able you know, you're in your class and you don't get to see them*’. Kate consistently picked up on the positive impact observing in FS had on her identity as a teacher. For example, in week 3 she wrote on the staff individual review sheet: ‘*Observing the children and how they interacted with each other in a different environment was very useful and interesting.*

Really enjoyed the experience today. Children were very engaged and allowed me to see a new aspect of teaching'. Two weeks later she wrote of her own practice as a teacher: 'Be more mindful to give children more time to process their learning. Allow them to lead the activity more'. And the next week: 'Sometimes allowing children to take the lead. Trusting them to be aware of the dangers'.

Laura (FSL) acknowledged how difficult it was for her to encourage teachers to take a step back in FS:

It is very difficult for me to be in that situation...I find that very awkward sometimes with teachers...especially with teachers who are new, I've said it before to all the teachers you know, you kind of need to relax and you don't need to jump in ...I hate saying that. And I do feel as if people might take offence and, you know, I think that's understandable...we have to be on the same level, we have to understand that that we can trust each other.

6.6.2 Teacher as Participant.

For Laura, a high point of FS was witnessing what she called the *'teacher's FS role'*. She described it as how the teachers *'became more involved without being the teacher, letting go and becoming more playful in their teaching'*. Laura actively encouraged the teachers to take part in the sessions. While this provided an opportunity for her to take a back seat and observe, more importantly it was a chance for the children to see their teachers participate in the activities: *'They like to see their teachers too part of it'*.

The different role that the teacher has in FS, when compared to the indoor classroom was acknowledged by Eva (teacher): *'I was way more comfortable and probably better at teacher role this time...it takes a while to adapt but it's so good for us to do so...important for both us and the kids'*.

Facilitating and participating in the closing circle worked very successfully for all of the teachers. Mary (teacher) described this as a *'bridge'* to going back to the classroom:

I think the golden moment or the song or whatever way we did it, I thought that was a lovely bridge between being observer and then we're ready, we're getting ready to go back where we will be in role again. I thought that for me that was the missing piece of the jigsaw in previous years. And I felt that really worked.

Laura (FSL) was in agreement: *'Yeah. I did I put that down as a high for me, because it kind of brought it together'*.

However, another teacher-led activity did not work so well. Initially it was planned that the teacher present would lead a story or a poem each week following

lunch. A discussion between Ann (teacher) and Laura (FSL) following a poem that Ann brought to FS opened with her saying that she would probably not bring a poem the following week as the children were ‘messing’. Laura replied that rather than wanting everyone to listen at the same time, which was the intention of the teacher, ‘you wonder if you just sat down and just read a poem you know, it doesn't have to be in a group or all the group’. The teacher went on to ask how the story or poem had been managed previously and at what time of day. Laura was circumspect:

There's no saying what's right and what's wrong. You know what I mean? It could be a poem first thing in the morning. It could be a book. Do we get them at that time when they're like so busy chatting and still hyper? Or do we get them when we're ready to settle down? You know, when I said this morning, did anybody want to get the circle done but they just sat. And maybe that's the time. To kind of just settle them.

These kinds of ‘on-the-hoof chats’ about practice were very important in enabling teachers to think about their own pedagogical practice. Following this session, there were no further stories or poems led by the teachers in the sessions I attended, in part due to time constraints and a priority to free play, but I also sensed a lack of enthusiasm associated with the children’s reaction that first week.

6.6.3 Teacher as Collaborator

The collaborative relationship between the FSL and the teachers in FS demonstrated in the previous paragraph was typical of the collegial culture fostered in Bay School and evident in how these adults interacted with each other. Review and reflection meetings provided a space to discuss different approaches and perspectives and to potentially enrich their pedagogical practice. The following extract from one of the review sessions is typical. In this extract, Kate (teacher) is describing how she was unsure as to when to intervene with a group of girls to encourage them to take out their lunches. The FSL had gone ahead and encouraged all of the children to join her for lunch. It also demonstrates the FSL in a kind of ‘mentor’ role to the teacher.

Kate: So, the other day when it was time for lunch, you know whether or not to be like COME ON [said loudly and stridently] girls or come on now girls its lunch [said jovially and informally] or do you let them have that time? You know, like when do you know play is now over?’

In response, Laura said:

Give as much as you can. But as the adult you have to jump in, ‘cos what you feel is different to what I feel. So, I could probably cut short quicker than you or I could let it go longer than you. We are the only ones there to protect them.

These collaborative discussions extended to curriculum content. For example, Ann (teacher), Jean (teacher) and Laura (FSL) discussed learning the names of the trees. Ann (teacher) described it as *'kind of hard because, sometimes I want to teach the names of the trees and you say No, no, no, you're not doing that'*. Laura went on to say:

I understand where Ann is coming from. I think it's great that kids do know [names of trees]. But we've kind of want them to come forward rather than us giving something. And I think if we could incorporate it in a way that, you know, [if you notice a child interested a say a tree], or looking at a leaf [maybe] leave a book out... it's amazing how many kids would take it out and just sit there and say, I've just seen that and go off with the book ...that's a great moment.

Jean then interjected: *'And it's child-led rather than the teacher'*. There was a sense among the teachers that presenting information was not permitted in FS, as in some way contravening the principles of FS.

6.7 Theme Five: Resourcing FS

FS is a high-profile, flagship project in Bay School that impacts on staffing right across the school. Part of the impact of FS on staffing resources was to do with the priority to integrating FS with the 'indoor' teaching and learning in Bay School. While the teachers were generally happy with the level of staffing and the resourcing of FS, Laura (FSL) and Clare (principal) highlighted the human resource impact of FS as an ongoing concern, reflecting their leadership roles in FS and Bay school respectively. For Laura, this concern was associated with having sufficient staff to facilitate safe skills development, and tool use, during the sessions: *'It just makes me relax when I have an extra and I can get the tools out. I'm always worried about the tools 'cos all it takes is one slip you know'*. For Clare, it was about being able to release staff to participate in FS: *'it's the staffing which I really struggle with, we're constantly down support staff'*. Clare highlighted the importance of a whole school approach:

I think a really important part is you need staff on board. Because not all the staff are in the forest, but you need all the staff collaborating in the backyard to get to the point that people can go to the forest, you know, that's really important.

Clare also referred to prioritising time for review and reflection: *'That was the one part we felt here was slipping. And we talked about it, you know, well, how do we actually make sure that the reflection piece happens even with the best of intentions?'* Laura also highlighted induction for staff new to FS and continuity of staff provision; a view shared by Kate (teacher) who described it as *'difficult'* to join in half way through the series of sessions, as she did.

6.8 Children's Voices

These children understood and experienced FS as a sensory, experiential pedagogy with(in) nature that was fun, enjoyable and different in key respects to the regular classroom. These views were held across this sample of children with a small number of contrasting views associated with particular aspects of individual experiences.

6.8.1 FS is Learning with(in) Nature

In contrast to the staff, all of the children associated FS primarily with learning about nature and about how humans interact with nature. Jill (child) described FS as: *'all about nature, being outdoors and exploring the forest. You learn about trees, birds, insects and appreciate nature.'* Tina (child) described how: *'You learn a lot about nature and how animals react and how animals live and you learn how to ... react when you are in the forest'*. Ian (child) said: *'Like, do not touch, respect, don't take branches off trees and don't take the leaves off trees and just don't take flowers'*. Two children described learning about other people's attitudes to nature in FS. Tina (child) for example said:

Well, I learned a lot about people and how they act when they're around trees and stuff. Some people climb them. Some people just really respect them and don't go near them and tell other people to not go.

When asked about *how* they learned in FS, they acknowledged the role of nature as teacher, evoking a sense of simply being within the woods as a powerful learning experience. Ian (child) said: *'You just learn by yourself, just being around the forest you know, like, don't take branches or get leaves off the trees'*. These children felt that learning about nature *in nature* was more effective. Finn, said: *'Cos like you get to like you can look around and see what actually nature is? You get to feel it and see it'*. Tina (child) said: *'Well, It's better to learn it in the forest when you can actually see it and do it'*. She went on to say that that experience in nature could then be supported back in the classroom: *'and then in the classroom you can more learn **about** [her emphasis] the stuff they do'*.

Similar to the adults, all eight children in the focus groups described feelings of relaxation, of kindness and of care associated with being in nature. For Fiona (child) nature helped her to feel calm: *'Nature inspires me. Like if I'm having a bad day 'cos my brothers giving out to me saying WE'RE GOING TO BE LATE [shouted these words]'*.

These children expressed a care and a respect for nature as a fellow living thing. Tina (child) said:

You can't cut down trees. It just makes it the environment worse 'cos they help you breathe. If there was only one tree nothing would be alive and you couldn't give enough air to anything so you see how people react if they care about trees.

Tina also noted how Laura (FSL) really cared about trees. Jill (child) said: *'In FS you have to learn to be more kinder to nature 'cos it's also a living thing, instead of ripping this off and crumbling leaves onto the floor you have to respect them'*. Finn (child), said *'We should be really nice to trees'* and Fiona (child) responded: *'Because they help us breathe'*.

6.8.2 FS is Sensory and Experiential

For all eighteen children, FS was understood and experienced as a sensory, embodied, learning experience associated with fun and friends. The words used to describe the 'highpoints' of FS by these children below are indicative of the experiential nature of FS for them. See Figure 27, *Children's Highpoints of FS*.

Figure 27

Children's Highpoints of FS



Of ninety-eight words used by the children to describe the highpoints of FS for them, a quarter (24), highlighted in blue, were associated with food and a quarter (23), highlighted in green, were associated with nature and weather. Seventeen words

highlighted in red, described tool use and skills development. Sixteen words highlighted in orange, described physical activity, including games. Eight words, highlighted in yellow, were to do with friends. Smaller numbers described free play Parents' Day, fun, diaries and drawing.³⁵ For one child, 'no schoolwork' was a highlight.

Asked to describe FS in writing, of eight children who responded as part of the Owls activity pack, seven included nature words (such as, park / forest / woods / outdoors); five mentioned learning, five mentioned fun and three mentioned the chance to play. Adam (child) said:

When you hear the word forest school you probably think of a desk in the middle of the forest with all your books and your pencil case. But that is not how it works. We learn things by doing stuff outside instead of from a book. We learn how you would survive if you just lived outside. We even have time to play. We don't go everyday but whenever we do it is lots of fun.

The sensory nature of the FS experience for these children is evident in these descriptions and opinions. Asked about what kind of things were needed for FS to happen, the children highlighted practical resources, the forest and people. Practical resources such as having the right gear, tools and equipment, food and drinks were mentioned in 14 (out of 15) responses. Thirteen (out of 15) mentioned the forest or a park. Ten (out of 15) responses mentioned teachers. Patrick (child) said: *'You need a park that is close enough to walk to with an area that people don't usually go in. You need Jerry [the trolley] to transport tools. You need teachers who want to do FS'*. Two others said there must be *'enough teachers'*. Tina (child) said: *'I think you [adults] need to learn about FS, you need lots of friends to help you. You need a forest. You need things to make it fun and you need to have food'*. These responses demonstrate their experience and understanding of FS as a pedagogical encounter that needs the adults.

The role of friends and peers was highlighted by six (out of 15) responses, mostly to have fun with and to play with. Liam (child) said: *'You need lots of friends to help you. You need a forest. You need things to make it fun and you need to have food.'* For two children friends were mentioned as first responders, should things go wrong: Ian (child) said: *'Friends to help you if it doesn't go right or if you don't feel well'*. For

³⁵ Parents are invited to come to FS for one session and to participate under the guidance of the children. Due to the Covid -19 school closures this day was cancelled during the period of the research study.

one child, Fiona, the potential dangers of being in nature was highlighted in her response:

I think you need a place where [there] is no dangerous stuff, like spiders because some people are scared of spiders. Also, you need waterproofs and hot chocolate and biscuits and squirty cream and marshmallows and you need a trainer [FSL] and you need to have a phone in case anything happens.

6.8.3 Learning in FS is Different

Learning in FS was experienced differently to the indoor classroom. FS was experienced as mostly to do with learning about nature, in nature, and as an ‘easier’ place to learn than the classroom. While FS was seen as different to the classroom, this was not about a dislike of the classroom, for all except one child, Patrick, out of 18, who described FS as ‘*getting time out from schoolwork*’. Tina’s (child) comment is illustrative: ‘*I like both, but I think I would much, much like FS a lot*’. She described the difference:

When you're in school it's man made. So, there is a big, big difference. Like in the forest it's not really clean. You can easily get dirty. In school you know it's all clean and it's all organised and you set the time. [In FS] it's just nature and you can smell nature.

When asked how the classroom could be more like FS, all eight children in the Robins focus group suggested active pedagogies like playing more games, making it more fun, and going outside more often.

Asked how the teachers would know that they were actually learning in FS, responses fell into two categories. Three children (out of eight) suggested looking at their diary: Fiona (child) said: ‘*cos when we go into our journals and we write what we've learned today and what we did today and I think that's how they know what I learned or what anyone learnt*’.

However, a majority (five out of eight) of the children said that the teachers would know that they were learning if they observed them having fun and not appearing to be bored. Jill (child) said: ‘*I think the teachers know that you're learning 'cos you're not just bored and like, I don't want to do this. You're happy and you're interested.*’ Liam (child) echoed this: ‘*While you're playing the teacher can look on you and if you're not really enjoying it, then come over and help you and find out*’. Finn (child) added: ‘*And say, what are you doing? And I wonder if you can find something to play with*’. They shook their heads when I asked if you're having fun, are you always

learning. Ian (child) said: ‘*Not mostly. Like half the time maybe and some of the time not*’.

6.8.4 Lowpoints

The least favoured parts of FS were associated with diary-writing and adverse experiences in nature. Figure 28 describes their edited responses when asked to write or draw their ‘lowpoints’ in FS.

Figure 28

Children’s Lowpoints of FS

tree spirits, jobs, bowsaw, rain, coats, tightrope, diary, walking, rain, the wee tree, puddles,
writing, dogs, walking, rain, hurting myself, writing, writing, rain, wet, diary, writing,
marshmallows, toilet tree, coats, writing, writing, hurt, wasps, writing, the stick game,
waiting, boundaries, muddy, games, friends, walking, coat, waterproofs, jobs

Legend

Diaries and writing (yellow)	The journey (purple)
Nature (green)	Injuries (red)
Activities (brown)	Toilet (grey)
Outdoor clothing (blue)	Other (no colour)

It was noteworthy that there were far fewer words (40) to do with lowpoints than highpoints (98) for these children. Almost a quarter of the words used (nine) were about diaries and writing, highlighted in yellow. For those who disliked diaries, this seemed to be associated with the indoor classroom and was seen as ‘hard’. Liam said: ‘*writing down in our journals because that’s my least favourite part of FS*’. *You should do that in school*. Fiona described: ‘*No writing, it’s hard*’. For others it was to do with wanting to have more time in free play, which generally began after diary time. However, it was notable that for two children, diary time was a highpoint (See Figure 27). In her respondent validation, Laura (FSL) in commenting upon this finding noted that for those who did enjoy this activity, it was a really important part of their FS experience.

Another quarter of the words (nine), highlighted in green, described adverse experiences in nature. Most were very specific individual experiences, for example rain, getting stung or muddy on a particular occasion. Smaller numbers described particular things they did not like, having to wear outdoor clothing or walking to and from FS.

Finally, there were specific one-off experiences, such as injuries, using the FS toilet and doing particular jobs.

6.9 Parents' Voices

These parents were universally supportive of FS and eagerly looked forward to their children's participation, findings which echo previous international studies (Kahriman-Pamuk, 2020).

6.9.1 Parents are positive about FS

When asked, prior to the sessions about their reaction to FS for their child, on a scale of one to five, (five being the highest) all 14 parents who responded (out of 16 forms), nine mums and three dads, said five. One mum gave a three and one dad gave a four. When asked how they thought their child would react, the results were the same. Following the sessions, all eight responses (out of eight, six mums and two dads) gave five for their own reaction and five for their child's reaction.

6.9.2 FS is a Favourite Activity

Nine responses (out of 22 forms returned) included a comment in the open comment box regarding their child's enjoyment of FS and of FS being a 'favourite' activity. Luke's mum wrote: *'Luke loved FS this year and has developed a real love for nature and the environment'*. Finn's mum wrote: *'Finn gets so much out of it and comes home full of beans'*. Aoife's mum wrote:

FS morning was the only day each week that Aoife (child) would be up and dressed first and ready to go to school, not wanting to be late. She likes school and likes going every day, but can be tired and slow in the mornings and needs a push along to get out the door on time. But not on the day of FS, it was a notable difference. It was by far her favourite part of the school year.

6.9.3 FS supports learning

Six parents (out of 22 forms returned) wrote open comments to do with how FS supported their children's learning. Adam's mum wrote: *'I think the children learn so much from teamwork to resilience. It also satisfies their natural curiosity about the world around them'*. Jill's mum wrote: *'It's a great initiative. The children get to experience being outdoors/ being active/problem solving/ freedom of choice/ life skills, I could go on forever!'*

One parent expressed concern that the 'freedom' in FS might need to be addressed for her child: *'Colm is really looking forward to FS. An upfront talk about the rules would help Colm know how to behave and enjoy the experience'*. Sam's mum felt FS would help him to: *'develop self -motivation and a bit more passion for activities'*.

6.9.4 Opportunities to Learn with(in) Nature are Important

Due to the Covid-19 emergency, activity packs were sent home to the Owls class, in lieu of a focus group. There was a space for parents to make comments on the sheet and three parents made comments. All three (out of ten packs returned) raised the importance of opportunities for children to spend time in nature, in light of the Covid-19 pandemic. One parent wrote:

I do hope with current restrictions on space and concerns around children being indoors together for too long, that some of the principles of FS could seep into the wider curriculum as children return to school in the face of this pandemic.

This was echoed by a second parent: *'It is an awful pity it was cut so short this year and it would be lovely to have an extended period of FS next year'*. A third parent commented on the importance of FS for children living in cities: *'I think FS is wonderful, especially for children living in a city'*.

6.10 Conclusion

This chapter paints a picture of FS as a positive and enriching learning experience in nature for both staff and children and is valued as such by their parents. FS seems to enable different kinds of relationships to evolve between the adults in their various roles, between the children and the adults, and between children and their peers. Being in FS also strengthened feelings of care towards nature and built a sense of connectedness between the children, the adults and the natural world.

Pedagogy in FS was collaborative, reflective and informal. It was facilitated by the affordance of the natural environment, extended blocks of time, high adult to child ratios and a high level of responsive planning, review and reflection. The embodied nature of learning and teaching and an organic approach to transitions helped to de-escalate behavioural issues. Teachers welcomed the opportunity to observe the children in FS; however, this was sometimes challenging and led them to reflect on their professional identity to varying degrees. These reflections led them to consider their professional identity and how that was expressed in the indoor classroom. Progression in FS was marked by the level of participation and engagement observed. However, the importance of quality provision, experience, and school culture, in supporting the delivery of FS was also raised. The discussion on progression raised questions as to whether FS represented an ethos; that is a way of being, associated with the values and spirit of Bay School.

The FSL was not part of the culture of the indoor classroom and did not share the identity of being a teacher there. Unwittingly perhaps, she was both mentor (to the staff) and facilitator (of the sessions). Thus, the opportunity for this group of adults to work together was innovative and potentially transformative.

Constraints on FS for the FSL were associated with not having enough time in FS to fully enact FS as a pedagogical approach. A minority of the teachers feared that the time spent in FS might lead to curriculum delivery in the indoor classroom being negatively impacted, even though all of these adults were in agreement that FS was highly integrated with curriculum delivery. Constraints were also expressed by the principal and by the FSL to do with sufficient, and consistent, staffing provision for FS.

The children associated FS with a sensory, active, fun, learning environment that was different to the indoor classroom. Like the staff, the children described being with(in) nature as restorative. Being with(in) nature made learning 'easier'. These children saw learning in FS as associated with caring for, and learning with and about nature, and they expressed a view of nature herself as teacher.

For the parents of these children, FS was a favourite activity for their children. The social and emotional benefits were highlighted in these parents' comments, as well as the importance of opportunities to be with(in) nature, especially for children living in urban areas.

Chapter 7: Findings

A National Survey

‘I once read that when we walk across bogland – across sphagnum – it may take a year or more before the footprints are absorbed and disappear. I want to think that somewhere that child’s impress, so hesitant, so venturesome, is lying decades below the surface, waiting for her return’ (Devlin, 2021, p.22).

7.1 Introduction

This chapter presents the findings from the national survey, in response to research question two. Seeking the views of Irish adults interested in FS was an effective way to contextualise the experience and understanding of those currently participating in FS in Bay School as described in the previous two chapters.

The design and content of the national survey is described in chapter five. This chapter begins by setting out the demographic characteristics of the respondents. This is followed by a presentation of the findings from the qualitative analysis. The chapter concludes with an account of the EFA conducted on the Likert items.

7.2 Demographics

7.2.1 Gender

Eighty-eight per cent of the respondents to the survey were female and 12% male. The gender breakdown for the Bay School grouping variable was similar. While a complete gender breakdown of FSLs in Ireland is not available, approximately 85% of FSLs trained in Ireland are female. A slightly lower percentage, 83%, of FSLs who responded to this survey, were female.

7.2.2 Age Group

The age profile of the Bay School respondents was older than the rest of the respondents. Twenty-five per cent of Bay School respondents were over sixty years of age. This compared to 9% of the FSL grouping variable and 13% of the primary setting grouping variable.

The largest group of respondents, 36%, was in the age group 18-30 years. This compares with 28% of the Bay School grouping variable who were in the 18-30 years grouping. This pattern may reflect seeking out respondents who worked in Bay School since 2012 to participate in the survey, some of whom have now retired. It may also reflect FS as an emergent movement in Ireland and the relatively high number of primary school student teachers who responded to the survey.

7.2.3 Occupation

Table 3 describes the occupational grouping of the respondents. Respondents were asked to state their occupation. Three respondents did not reply.

Table 3

Occupational Group of Respondents

Category	n	%
Mainstream Education		
Primary teacher	80	35
Early years/childcare	33	14
Primary school student teacher	14	6
SNA	13	6
Principal teacher	5	2
Other mainstream education*	21	9
Environmental and Outdoor Education (EOE)		
FSL	16	7
Outdoor educator	15	7
Forestry and ecology	5	2
Health and Social Care	10	4
The Arts	5	2
Various **	12	5
No response	3	1
Total	232	100

Note. *Other mainstream education includes those at second and third level and those working in special education settings.

**Various includes parents in the home; those working in hospitality and in retail.

I organised them into five broad categories: mainstream education; environmental and outdoor education (EOE); health and social care; the arts and a fifth, 'various', grouping. Within the mainstream education grouping, the largest category was primary teachers (35%). Early years educators and school age childcare providers were the next largest grouping (14%). Primary school student teachers and SNAs each comprised 6% of the respondents. These findings indicate particular interest in FS from primary and early years educators.

Within the broader grouping of EOE, just 7% of respondents described their main occupation as a FSL, perhaps a reflection of the emergent status of FS in Ireland. Other environmental occupational groupings among the respondents were outdoor educators (7%) and those working in forestry and ecology (2%). Thirty-four per cent of males in this study described their main occupation in EOE, compared with 11% of female respondents. Considering that the overwhelming majority of respondents were female, it may be that FS offers an opportunity for more women to get involved in EOE.

Health and social care workers (4%), those working within the arts (2%), a ‘various’ category (5%) which included parents working in the home, and hospitality and retail workers, comprised the remaining categories. The variety of occupational backgrounds of respondents to the survey is indicative of broad interest in FS and potentially represents a diverse and inclusive movement in Ireland. However, this source of richness and diversity also underpins the importance of training to ensure a shared understanding of FS pedagogy, a point highlighted by Knight (2011) who described similar findings in England and Wales.

Educational Setting based for Work. Respondents were asked to describe the educational setting in which they were mostly based for work, from a list of six categories (early years, primary, secondary, third level, community setting, and other). There is interest in FS across the different levels of formal and informal education in Ireland. The largest grouping was primary (52%), followed by early years (14%). Taken together, this comprises 66% of respondents and indicates strong interest in FS from these sectors, mirroring the international interest in FS. There is emergent interest in FS in secondary, third level and special education settings. Sixteen per cent of respondents said they worked across different education settings. They are most likely independent providers of FS. No further information was available.

Geographical Setting based for work. When asked about the geographical setting in which they were based for work, from a list of three categories (rural, urban and town/city), 38% of respondents described being based in an urban setting; 28% described being in a rural setting and 33% said they were based in a town or city. These findings indicate broadly similar interest in FS across all three geographical settings, in contrast to early findings by Knight (2011) who described emergent FS in the UK context as mostly in rural settings.

7.2.4 FS Qualification

FS training has been provided in Ireland since 2013 and there are now (2022) approximately 275 trained FSLs in Ireland. Table 4 describes the FSL qualification of the respondents to the survey.

Table 4

FSL Qualification of Respondents

Level 3 FSL Qualification	n	%
Yes	62	27
In training	41	18
Intend to train	19	8
Not trained	110	47
Total	232	100

Twenty-seven per cent of those who participated in the survey were trained FSLs. A further 18% of respondents were, at the time of the survey (2019 – 2020) completing training as FSLs. These two categories were collapsed into one, called FSLs, for further analysis; this category comprised 45% of the respondents. The category ‘Not trained’ comprised those who were not FSLs (47%) and the respondents (8%) who indicated an intention to train as FSLs in the future. This category comprised 55% of respondents.

Just 7% of those who responded to the survey described their main occupation as a FSL (See Table 3), even though 45% of the respondents were either already trained or in training as FSLs at the time of the data collection. It can be concluded that for most FSLs, being a FSL is ‘part’ of their main occupational role, or ancillary to it. It may also be that they prefer to describe themselves as outdoor educators or environmental educators. No further information was available to explore this more fully.

7.3 Perspectives on Nature

Respondents were asked whether learning about the natural world should form an important part of every child’s upbringing. There was overwhelming agreement with this statement; 86% of respondents expressing *strong agreement* and a further 13% *agreement*. This suggests very strong support for learning about nature amongst these

respondents. However, what exactly this meant for individual participants was not explored directly; rather, it can be extrapolated from their response patterns to other questions in the survey.

This interest in the natural world was also evident in these respondents' own lives. Seventy-seven per cent of all the respondents had participated in environmental activities in the previous year. This included attending a workshop or event; participating in a social media or letter writing campaign or signing a petition. When the responses were examined by the Bay School grouping variable, 66% of Bay School respondents had participated in environmental activities in the previous year, compared to 79% of the rest of the respondents.

A further level of civic engagement associated with environmental action is about leadership involvement, for example *organising* a workshop or event; a social media or letter writing campaign, a rally, a petition about an environmental cause. Thirty-six per cent of all the participants had organised environmental activities in the previous year. When the responses were examined by the Bay School grouping variable, one quarter of Bay School respondents (25%), compared with 38% of the rest of the respondents, had organised an environmental activity in the previous year.

The Bay School respondents had the lowest participation rate and the lowest level of organisation of environmental activities of the three grouping variables. This is somewhat surprising, given that Bay School itself is involved in other environmental activities, such as Green School Ireland ³⁶. They have also had a high level of involvement in local environmental community projects and see nature connection and access to nature as important for children. It may be associated with the older age profile of Bay School respondents, as such activism is associated with youth (Riemer, Lynes & Hickman, 2014).

In contrast, 50% of the FSLs grouping variable had organised environmental actions in the previous 12 months and 85% had participated in such activities. The higher levels of engagement in matters of environmental concern by Irish FSLs at both the level of participation and leadership underlines the potential for collaboration between FSLs and schools on environmental education.

³⁶ Green School Ireland promotes long-term whole school action for the environment, student involvement and community collaboration. <https://greenschoolsireland.org/>

7.4 Qualitative Findings

This section sets out the findings of the analysis of the five qualitative questions in the survey, in turn. These were:

1. How would you describe FS to someone who had never heard of it?
2. How did you become involved in/ interested in/hear about FS?
3. From your experience, what do you need to introduce FS into a setting?
4. What do you think is distinctive about FS as an approach?
5. How would you describe good teaching (in any context)?

All five qualitative questions were optional. Sammons, Kington, Lindorff & Ortega, (2018) describe response rates to optional questions of over 80% as ‘*very high*’ (p. 341). In this study, the response rates for all five questions were all over 90%, with one exception, question 3, where the response rate was 89%. A majority of these responses were quite detailed; given the open-ended nature of the questions, the response pattern was wide-ranging. Where a theme was mentioned more than once in a single response, this was coded only once to that theme.

7.4.1 Describing FS

Respondents were asked to describe FS to someone who had never heard of it. 93% of respondents replied to this question. Inductive thematic analysis resulted in six themes: place, pedagogy, intention, risk, time and training. Unsurprisingly, these themes are closely aligned with the six principles of FS. The inductive approach to analysis was maintained despite the close alignment with the six principles of FS. None of the responses fell outside of these six themes, with the exception of three responses subsequently excluded from the analysis. Table 5 describes these findings numerically for the Bay School grouping variable and the rest of the respondents. Themes are listed in order of magnitude. A majority (over 50%) of the responses were coded to at least two of the themes; 41% of responses were coded to three themes or more. Just one respondent in the Bay School grouping variable and five respondents in the wider FS community explicitly mentioned all six themes in their responses.

Table 5*Respondent Description of FS*

Grouping	Bay School		FS community		Total	
Response rate*	(29)	94%	(185)	93%	(214)	93%
	n	%	n	%	n	%
Place	28	97	167	86	195	91
Pedagogy	15	52	114	62	129	60
Intention	18	62	107	58	125	58
Risk	6	21	26	14	32	15
Time	4	14	27	15	31	14
Training	3	10	12	6	15	7

Note: * Three responses were excluded from this analysis. Two respondents responded they were ‘unsure’ and one said they were ‘new to the school and just heard about it’.

A sample of the responses and the coding is included here:

*Using a woodland setting (**Place**) in a sustained way (**Time**) where children learn by interacting with nature (**Intention**) in a safe manner (**Risk**). The experiences are child-led (**Pedagogy**) and the FSL (**Training**) presents an idea but is mainly the observer or reflective practitioner (**Pedagogy**) (C6).*

*Children spending one day a week (**Time**) outside (**Place**), learning collaboratively (**Pedagogy**) and becoming more in tune with nature which would have a direct impact on other areas of learning; socially, culturally and within the curriculum (**Intention/Pedagogy**) (R158).*

*A process of engaging people (**Pedagogy**) with the natural world (**Place**) in order to develop cultural and environmental resilience, kinship with the more than human world, confidence and community (**Intention**) (R88).*

*It is outdoor education (**Place**), but it is child-led (**Pedagogy**) and follows the six principles. I would then explain [the six principles] focussing on the forest (**Place**) and the long-term aspects (**Time**) (R86).*

The following sections will explore each of these themes in more detail.

Place. Place was the theme that emerged in the highest number of responses. Ninety-one per cent of the respondents described FS in terms of place. Words and phrases like learning or experience in the outdoors, in nature, woodlands, parks, natural environment, nature connection, nature-based learning were coded to this theme. Place was more likely to be mentioned by the Bay School grouping variable (97%) than the rest of the respondents (86%).

This understanding of the sites used for FS recognised the FS can take place in parkland or school grounds. One said '*FS doesn't need a forest, it can take place in a green area with trees or shrubs*' (CS7). Surprisingly, just two participants, one from Bay School and one from the wider FS community used the word 'local' to qualify the natural space in FS. The response pattern was wide-ranging, from '*learning outside in a garden area*' (R84) to '*they learn to interact softly with the natural world*' (R76)', indicative of the range of experiences and understandings of FS among the respondents.

Pedagogy. The second most frequently mentioned theme was Pedagogy.

Responses were coded to pedagogy when respondents used terms such as child-led / learner-led / experiential / nature-based approaches / discovery learning / play-based / active learning / reflection / exploratory approaches / collaboration / facilitation / problem solving / innovative / holistic / immersive / self-discovery. For these respondents, pedagogy in FS was associated with a progressive, experiential approach to learning that was seen as 'different' to the indoor classroom and more easily actualised in nature than indoors. A sample of the responses coded to pedagogy are described here:

FS is a person-centred approach, where children are encouraged to be self-directed learners (R159).

FS is child-led and there is an emphasis on facilitating activities and play (R169)

An exciting different approach to learning for life (R186)

Experiential collaborative learning in nature, facilitated by a specialised adult (C27)

Outdoor collaborative and community-based approach to learning where children are given opportunities to learn through enquiry and exploration of their local natural environment (C15)

Sixty per cent of respondents made reference to pedagogy in these kinds of terms. This percentage was lower (52%) for the Bay School grouping variable compared with 62% for the rest of the respondents. This may relate to the Bay School experience of the constraints imposed on pedagogical practice by larger classes, curriculum and other statutory requirements. The higher percentage of responses from the rest of the respondents may represent a vision, an ideal of FS as a way to realise more progressive pedagogy in our schools. For those from a non-teaching background, their understanding of pedagogy may be associated with their own prior experience of being

a student. Alternatively, it may reflect pedagogy associated with being an outdoor educator, which is associated with a more experiential and reflective approach to pedagogy than school-based pedagogy (Blenkinsop et al., 2016; Quay, 2016). The terms child or learner-led was mentioned by 13% of respondents who mentioned pedagogy in FS. This percentage was higher for the Bay School grouping variable (19%) compared to the rest of the respondents (12%). The idea of nature as teacher was mentioned by one Bay School respondent who described '*learning about the outdoors through nature*' (R28C) and by seven of the respondents in the wider FS community. One said FS was about learning from '*the greater philosophical questions that nature encourages*' (R33). Another described the '*opportunity for being in relationship with a natural ecosystem*' (R87). Nature was much more likely to be mentioned in the context of the intentions associated with participation in FS, discussed below.

Intentions. Like pedagogy, there was a wide-ranging set of phrases coded to this theme. Intention is to do with the purpose and aims of FS in respondents' descriptions of FS. Fifty-eight per cent of the respondents mentioned learning intentions or aims in their descriptions of FS. This percentage was slightly higher for the Bay School respondents at 62% than for the wider FS community at 58%. Six sub-themes were described in order of magnitude as follows: personal development, nature connection, skills development, opportunities to experience a sense of freedom through participation in progressive, experiential pedagogy, opportunities for fun, and opportunities to experience 'safe' risk.

Over 50% of those who mentioned intentions described a broad set of personal development intentions, associated with life skills, confidence, wellbeing, social interaction, teamwork, engagement, resilience, intuition, self-awareness motivation and building a sense of personal responsibility. There were no differences across the Bay School and the wider FS community grouping variable. For example, one respondent said: '*children can explore and challenge their own personal boundaries*' (R22). Another said: '*a chance ...to develop resilience and to practice spiritual mindfulness*' (R31) and a third: '*building confidence, resilience and independence*' (R57).

A similar percentage, over 50%, mentioned nature connection as an intention for FS, with no differences across the Bay School and the wider FS community grouping variable. Sample responses coded to this category of intentions included:

Providing opportunities to express themselves through nature and...learn how to develop skills in the outdoors ...given freedom to explore nature around them (10C).

The opportunity to enjoy and explore their environment and learn to respect all aspects of it (15C).

Respondents talked about nature connection intentions using terms such as curiosity, connection, empathy, self-awareness and awareness of interdependence, as these responses illustrate:

FS encourages children to be curious about nature facts and how everything is connected (R106).

FS is a chance to connect with the natural world and therefore a chance to feel part of it and develop empathy and a desire to protect it(R113).

FS is about inspiring and supporting curiosity and inquiry and promotes self-awareness, community and interdependence (R144).

The third sub-theme described opportunities to experience a sense of freedom through participation in progressive, experiential pedagogy. Ten out of the 21 responses coded to this sub-theme used the word ‘freedom’ to describe this intention. Five used words like exploring or exploration; smaller numbers described free play, free choice, following their interests and sensory experiences. One respondent described FS as an opportunity to ‘do what they like, as long as they are not hurting themselves, others or the environment’ (R73). Smaller numbers of respondents mentioned opportunities to take risks, to have fun and to develop skills.

Risk, Time and Training. The final three themes, Risk, Time and Training were significantly less likely to be mentioned by these respondents. The theme of risk included reference to safety concerns, learning to take risks safely, or recognising risks. Risk was mentioned by 15% of the respondents, with the Bay School respondents more likely to mention risk (21%) than the rest of the respondents (14%). Risk was also mentioned in the Intentions theme (11%) in the context of FS providing opportunities for positive risk taking. Three of the four Bay School respondents who mentioned risk saw FS as being a ‘safe’ environment in which to experience risk. In the wider FS community, those who mentioned risk described the practitioner’s role: ‘to manage risk, to allow the learners to make their own decisions’(R45). Another wrote: ‘to provide ‘satisfying, challenging activities’ (R44). Another described risk in the context of giving opportunities to try: ‘things they would not otherwise have a chance to do’ (R77).

Why so few respondents referred to risk is unclear. It may be that they do not consider FS risky or they are not worried about risk in FS. Interestingly, Madden (2019) described as ‘*striking*’ (p. 256) that safety issues in going outdoors were not a concern for his respondents, leading him to conclude that international findings on risk and learning outdoors were not as relevant in the Irish context. This was borne out in this study. Time was mentioned by 14% of respondents with minimal differences between those in Bay School and the wider FS. Repeated visits to the same place, for an extended period of time is a key principle in FS pedagogy, one that distinguishes it from types other OE. Therefore, it is somewhat puzzling that it was not afforded higher priority by these respondents. The final theme, Training, coded references to trained FSLs. Seven per cent of respondents referred to training directly in their responses to this question. Ten per cent of Bay School respondents and 6% of the wider FS community mentioned training when describing FS.

7.4.2 Becoming Involved in FS

Respondents were asked how they heard about or became involved in FS. Ninety-six per cent responded to this question. The responses were coded inductively into eight categories. Table 6 describes the responses.

Table 6

Becoming Involved in FS

Category	Bay School		FS community		Total	
Response rate	31	97%	192	96%	223	96%
	n	%	n	%	n	%
Word of Mouth	-	-	52	27	52	23
Work	29	94	21	11	50	22
Personal interest	-	-	40	21	40	18
College	2	6	25	13	27	12
Participation in other OE	-	-	22	11	22	10
FS events	-	-	20	10	20	9
Lifelong interest	-	-	11	6	11	5
Other*	-	-	1	1	1	<1

Note. *One participant described a dream as awakening her interest in FS

In the Bay School grouping variable, of 31 responses, all except two respondents first heard about FS through the school. This finding may relate to the emergent nature of FS in Ireland and its early adoption in Bay School. It may also indicate the importance of school-based innovation as a way to effect changes in pedagogy in our schools.

For the rest of the respondents, a much broader set of influences were at play in their introduction to FS. Eleven per cent heard about FS through their workplace. This compares with 94% of Bay School respondents. Word of mouth (27%), personal interest (21%) and college (13%) were also influential for the wider FS community. For a smaller group, a previous interest in OE (11%) and attendance at FS taster days and other events (10%) were influential in introducing them to FS. A small group (6%) described a lifelong interest in the natural world. This interest in the natural world may indicate that a primary factor in becoming interested in FS for the wider FS community is associated with nature connection. In contrast, the impetus in Bay School was to do with enhancing social and emotional development through nature-based pedagogy.

7.4.3 Introducing FS

Respondents were asked what was needed in order to introduce FS into a setting. Eighty-nine per cent responded to this question. Four main themes emerged in the inductive analysis. In order of priority these were practical (resources, funding, access to a natural space, insurance, clothing and equipment); philosophical (a mindset associated with a passion for learning in nature, a vision for such work, and an enthusiasm and openness to innovation); human (sufficient trained staff) and documentary (written policies and procedural information). Table 7 describes these themes numerically in order of their importance to these respondents.

Table 7

What is needed to introduce FS?

Category	Bay School		FS community		Total	
Response rate	(28) 88%		(179) 90%		(207) 89%	
	n	%	n	%	n	%
Practical	16	57	106	59	122	59
Philosophical	16	57	101	56	117	57
Human	17	61	88	49	105	51
Documentary	8	29	57	32	65	31

For these respondents, practical considerations and philosophical commitment followed by human resources and to a lesser extent documentary resources were all part of introducing FS. Response patterns were quite similar across the grouping variables, with the exception of human resources.

Practical resources are a priority as FS cannot happen without access to a natural space or without the proper clothing and equipment needed. One wrote: *‘All participants require appropriate clothing, but all other resources are not strictly necessary’* (C17).

Philosophical commitment is of almost equal importance as practical resources for these respondents. The importance of a vision for FS seems to be understood by these participants, who mentioned words like enthusiasm, supportive and open minded in connection with their importance in making FS more widely available. Sample responses coded to this theme included:

An open mind and a positive outlook – the ability to look at the bigger picture rather than focussing on any inconvenience (C29).

Dedicated, creative, brave and visionary people (R22).

The main ingredient is having staff believe in the ethos [of FS] (R57).

A number of respondents mentioned the importance of ‘buy -in’ from management and colleagues. One said: *‘people in leadership who have an attitude of ‘how can we make this work, rather than what if [things go wrong]’* (R195).

Sixty-one per cent of Bay School respondents compared to 44% in the wider FS community saw the provision of human resources as crucial to the provision of FS. This may reflect the ongoing constraints of staffing issues and timetabling pressures described in the previous chapter. These concerns may not arise for independent practitioners in the same way; although the high adult to child ratios may impact on the cost and quality of provision.

Documentary resources were of less importance, perhaps reflecting the relative widespread availability of templates and other materials online. It may also be that these respondents attached less importance to documentary resources.

7.4.4 Distinctiveness of FS

The distinctiveness of FS as a pedagogical approach was also explored qualitatively in the survey. Table 8 sets out these themes numerically in order of magnitude. Ninety-four per cent of respondents replied to this question.

Table 8*Distinctiveness of FS*

Category	Bay School		FS Community		Total	
Response rate	30	94%	188	94%	218	94%
Theme	n	%	n	%	n	%
Autonomy	23	77	113	60	136	62
Place	18	60	101	54	119	55
Experiential Learning	6	20	27	14	33	15
Six Principles	0	-	5	3	5	2
Various*	0	-	5	3	5	2

Note. *Various describes five responses that did not fit with any categories. These were learning without borders; respectful; self-esteem; dialogue and length of programme.

Five themes emerged from the inductive thematic analysis. In order of magnitude these were Autonomy, Place, Experiential Learning, Six Principles and Various.

Autonomy was the most distinctive feature of FS for the respondents to the survey. Autonomy as a theme comprised references to freedom, trust, child-led and learner-led learning, play and playfulness, fun, choice, empowerment and democracy. Some examples of responses coded to this category are:

Openness for child-led learning (R70)

The freedom of children to choose, to be self-led (R128)

The fact that it returns the child's freedom back to them (R156)

Its focus on open-ended activities (R161)

A small percentage (5%) of the responses coded to autonomy were associated with adult freedom to practice collaborative, inquiry-based pedagogy. For example, '*Less of controlled indoor learning and more enquiry, exploration based*' (R80).

For the Bay School grouping variable, responses associated with autonomy were a substantially higher percentage (77%) than the rest of the respondents (60%). This may reflect the reality of the experience of FS in Bay school and their vision of FS as contributing to greater autonomy for the children (and for the adults) that the classroom enables. Indeed, this may reflect the reason why they introduced FS in the first place.

Fifty-five per cent of the respondents saw place as a distinctive factor in FS (See Table 8). Place was overwhelmingly associated with opportunities to be in nature. The vast majority of these responses referenced being outdoors in nature using terms such as

nature connection, learning in nature, the outdoor environment, nature pedagogy or being in the woods or the forest. A sample of responses are indicative:

Interaction with nature as the primary teaching strategy (R19)

Outdoor setting, developing a connection and relationship with nature (C10)

Innovative outdoor learning (R57)

A very small number of respondents (3%) described the distinctiveness of place in FS as a freedom from the classroom. For example: '[In FS] *knowledge is drawn from inside the person instead of stuffing it in*' (R105) and '*less controlled than indoor learning*' (R80). Four others (3%) described place using both categories, that is being in nature and freedom from the classroom. For those who saw FS as a way of 'escaping' the classroom, this implies a negative association with the indoor classroom and schooling more generally. In contrast, the vast majority of these respondents see FS as enabling progressive experiential pedagogy that is currently not accessible in our schools because of the way they are organised. In this view, FS extends the site of learning from the classroom to the forest.

For smaller numbers of respondents, the distinctiveness of FS was about experiential learning (14%). This percentage was higher for Bay School respondents (19%) potentially reflecting the realities of their experience. This theme included descriptions of FS as hands-on, holistic, immersive and practical activity and exploration that were associated with life skills, as the sample responses here demonstrate:

The child's whole self is engaged, not just the bit from the head up (RC1)

FS is a hands-on learning experience. All the senses and fine motor skills are developed (R106)

Immersion in nature using all the senses (R108)

For five respondents in the wider FS community, the distinctiveness of FS was its uniqueness as expressed in the interconnectedness of six guiding principles. All are required in order to enact FS with fidelity.

7.4.5 Good Teaching

Ninety-two percent of the respondents responded to this question. All of the responses described good teaching as being about building a relationship with the learner that prioritises collaborative, experiential, holistic, relational approaches to praxis. Good teaching is inclusive and celebrates the diversity of learners. The teacher is seen as a facilitator and a mentor. Curriculum is broadly interpreted and curriculum

delivery is cross-curricular and integrated with the lived experience of the learners. The following examples of the responses are indicative:

Showing that I care about them and their wellbeing (R17)

Celebrates all types of learning, interests and strengths. Children are encouraged to see themselves as part of a whole and to develop a sense of responsibility for other humans and their environment - essentially, children realise the power of and strength and gradually become changemakers (R141).

Mentoring, inspiring, facilitating people to become confident and competent learners, sowing seeds(R42)

An awareness of self and a willingness to step back and observe. An understanding of a subject to such a degree that you are able to identify opportunities for learning and present them in a diversity of ways, for a diversity of learning styles with play and fun at the heart of it all! (R880)

A small number of respondents qualified their description with reference to the importance of context, including issues such as class size, the role of the teacher, educational purpose and curriculum planning. One said: *'To bake bread there has to be rules or it isn't bread!'* (R94). Another described:

Evidence-based, child-centred, with a strong emphasis on accomplishment of the three Rs (old fashioned label) and after that inquiry/curiosity-led projects (individual & collaborative), with as much of the school day taking place outdoors as possible, even on-site outdoor classrooms rather than off-site woodland settings (R150).

These respondents can collectively be said to value diversity, curiosity and ideas, democracy and voice and an eclectic, emergent approach to planning, teaching and learning, and assessment.

7.5 Exploratory Factor Analysis (EFA)

EFA using Principal Axis Factoring was conducted on the 63 Likert items in the survey, in order to explore the factors, or latent variables, underpinning the responses. The details of the process are explained in chapter four. Three factors were produced and named:

- **Nature Connection (12 items)**
- **Traditional Pedagogy (7 items)**
- **Risk and Learning Outdoors (6 items).**

Descriptive statistics were used to examine the responses to the three factors for three grouping variables:

Bay School (n=32) and all other respondents (n=200)

FSLs (n = 103) and all other respondents (n = 129)

Primary School Setting (n = 121) and all other respondents (n = 111)

The findings for each factor will now be presented in turn.

7.5.1 Factor One: Nature Connection

EFA, using Principal Axis Factoring with oblimin rotation was used to explore the 29 Likert environmental items. The exploratory analysis is contained in Appendix T. At the conclusion of the exploratory analyses, a single factor unrotated solution was sought. The KMO value was .819, described as ‘great’ (Field, 2009, p. 647). The Bartlett’s test of sphericity (Bartlett, 1954) ($p < .001$) was ‘highly significant’ (Field, 2009, p. 660), indicating that the use of EFA was suitable for the data. The final factor comprised 12 items and was titled Nature Connection. See Table 9, Summary of EFA for Environmental items.

Table 9*Summary of EFA for Environmental Items (n= 232)*

Item	Factor 1	Factor 2	Factor 3	Factor 4
1. We are approaching the limit of the number of people the Earth can support				
2. Humans have the right to modify the natural environment to suit their needs				
3. When humans interfere with nature it often produces disastrous consequences				
4. Human ingenuity will ensure that we do not make the Earth unliveable		.375		
5. Humans are severely abusing the environment	.363			
6. The Earth has plenty of natural resources if we just learn how to develop them				
7. Plants and animals have as much right as humans to exist	.518			.441
8. The balance of nature is strong enough to cope with impact of industry		.352		
9. Despite our 'special abilities', humans are still subject to the laws of nature				
10. The so-called ecological crisis facing humankind has been greatly exaggerated		.381		.367
11. The earth is like a space ship with very limited room and resources		-.392	.450	
12. Humans were meant to rule over the rest of nature	-.498		.367	
13. The balance of nature is very delicate and easily upset				
14. Humans will eventually learn enough about how nature works to control it				
15. If things continue on their present course...major ecological catastrophe				
16. I feel a sense of oneness with the natural world	.746			
17. I think of the natural world as a community to which I belong	.733			

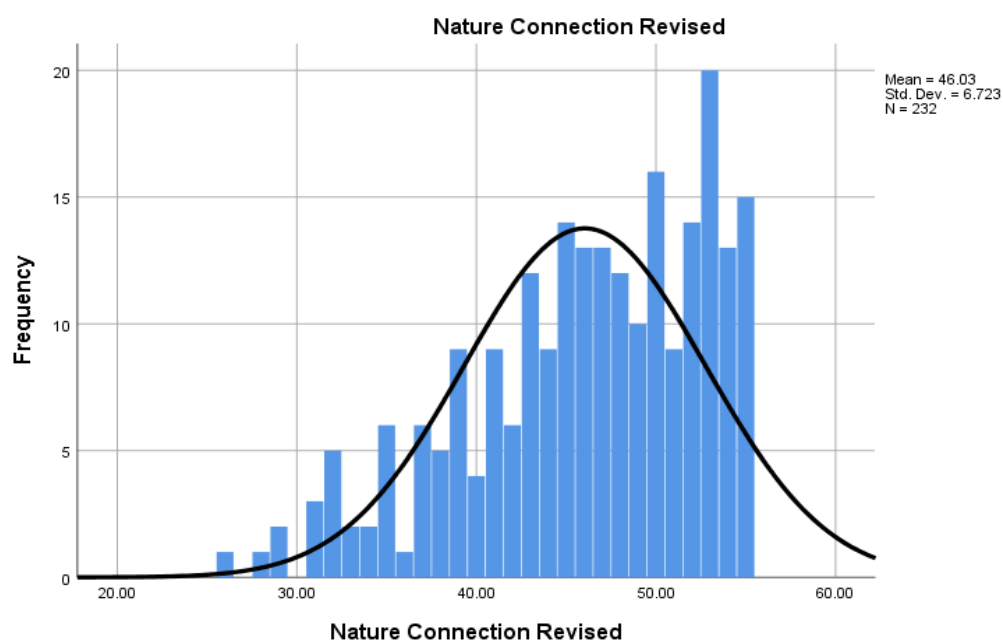
18. I recognise and appreciate the intelligence of other living organisms	.719	
19. I often feel disconnected from nature		
20. When I think of my life, I imagine myself to be part of a larger cyclical process of living	.605	
21. I often feel a kinship with animals and plants	.708	
22. I feel as though I belong to the earth as equally as it belongs to me	.570	
23. I have a deep understanding of how my actions affect the natural world	.443	
24. I often feel part of the web of life	.661	
25. I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.646	
26. Like a tree can be part of a forest, I feel embedded within the broader natural world	.748	
27. When I think of my place on Earth, I consider myself to be a top member of a hierarchy	-.390	.399
28. I often feel like I am only a small part of the natural world around me	.410	
29. My personal welfare is independent of the welfare of the natural world		

Note: Cronbach's Alpha .885; Factor loadings over .4 are highlighted in bold;

The final factor items are highlighted in bold in Table 9. The maximum score was 60. The higher the score, the more ‘pro-environmental’ the attitude of the respondent. Reliability was tested using Cronbach’s alpha (Cronbach, 1951) and was found to be .885, regarded as good (Field, 2009). Visual inspection of the dataset using a histogram indicated that Factor 1, Nature Connection, was not normally distributed. See Figure 29.

Figure 29

Histogram for Factor 1: Nature Connection



This was confirmed using the Kolmogorov-Smirnov test ($p < .001$, Kolmogorov-Smirnov $Z = .097$). Table 10 contains descriptive statistics (frequencies) for the 12 Nature Connection factor items.

Table 10*Nature Connection Item Frequencies*

	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
1 Plants and animals have as much right as humans to exist	0	0	2	1	17	7	40	17	173	75
2 I feel a sense of oneness with the natural world	0	0	5	2	43	19	73	31	11	48
3 I think of the natural world as a community to which I belong	0	0	7	3	23	10	65	28	137	59
4 I recognize and appreciate the intelligence of other living organisms	1	0	3	1	11	5	53	23	164	71
5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	2	1	11	5	32	14	68	29	119	51
6 I often feel a kinship with animals and plants	4	2	13	6	32	14	79	34	104	45
7 I feel as though I belong to the earth as equally as it belongs to me	7	3	18	8	52	22	61	26	94	41

8 I have a deep understanding of how my actions affect the natural world	2	1	12	5	47	20	104	45	67	29
9 I often feel part of the web of life	1	0	15	6	55	24	89	38	72	31
10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	1	0	5	2	33	14	84	36	109	47
11 1 Like a tree can be part of a forest, I feel embedded within the broader natural world	0	0	16	7	46	20	79	34	91	39
12 I often feel like I am only a small part of the natural world around me	3	1	11	5	36	16	73	31	109	47

The respondents expressed distinctly relational perspectives on the interconnectedness of all living things in their responses. Eighty-seven per cent either agreed or strongly agreed with Item 3, *I think of the natural world as a community to which I belong*. Eighty-three per cent either agreed or strongly agreed with Item 10, *I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'*. Seventy-three per cent either agreed or strongly agreed with Item 11, *Like a tree can be part of a forest, I feel embedded within the broader natural world*. Seventy-eight per cent either agreed or strongly agreed with Item 12, *I often feel like I am only a small part of the natural world around me*.

These respondents are deeply concerned about the natural environment and share a distinctly pro-environmental worldview. This perspective bears out the high number of respondents who indicated that they had participated in and led environmental activities during the year prior to participation in the survey. It also bears out the wholehearted support expressed by these respondents for learning about the natural world being part of every child's upbringing. The challenge is to actualise these attitudes in schools.

7.5.2 Factor Two: Traditional Pedagogy

EPA, using Principal Axis Factoring with oblimin rotation, was used to explore the 18 pedagogy items. The exploratory analysis is contained in Appendix T. At the conclusion of the exploratory analyses, a single factor unrotated solution was sought. The KMO value was .749, regarded as good (Field, 2009, p. 647). The Bartlett's test of sphericity (Bartlett, 1954) was ($p < .001$), 'highly significant' (Field, 2009, p. 660), indicating that the use of EFA was suitable.

Item 15, *There are essential pieces of knowledge that all children should know*, was retained as it improved the overall reliability of the scale and fitted theoretically even though it did not reach the .4 criteria for inclusion. The final factor comprised seven items and was named Traditional Pedagogy. The final factor items are highlighted in bold in Table 11, Summary of EFA for Pedagogy Items. The maximum score was 35. The higher the score, the more 'traditional,' pedagogically speaking, the attitude of the respondent. Reliability was tested using Cronbach's alpha (Cronbach, 1951) and was found to be .723, regarded as acceptable (Field, 2009).

Table 11*Summary of EFA for Pedagogy Items (n=232)*

Item	Factor1	Factor 2	Factor 3	Factor 4
1. The curriculum should be arranged according to subjects	.491			
2. Children learning from other children is an important part of any learning environment		.480		
3. Schools should be sources of new social ideas		.441		.418
4. Demonstration and recitation are essential components of learning	.432			
5. Schools exist to facilitate the development of self-awareness				
6. There are essential skills all children must learn in school	.580			
7. Teaching should centre on the inquiry approach		.378		
8. Children should be allowed more freedom in their learning activities at school		.475		

9. Children need close supervision at all times	.581	
10. Teachers should be facilitators of learning		
11. Factual knowledge is an important component of any learning	.534	
12. Learning skills and knowledge through repetition is a good way of learning		.592
13. Ideal teachers are constant questioners	.416	
14. Children should play an active part in curriculum design and evaluation	.364	.550
15. **There are essential pieces of knowledge that all children should know	.370	
16. Children should be taught at his/her level and not at the level of the class		
17. The curriculum should focus on social problems and issues	.358	
18. The teacher should be a strong authority figure in the classroom	.612	

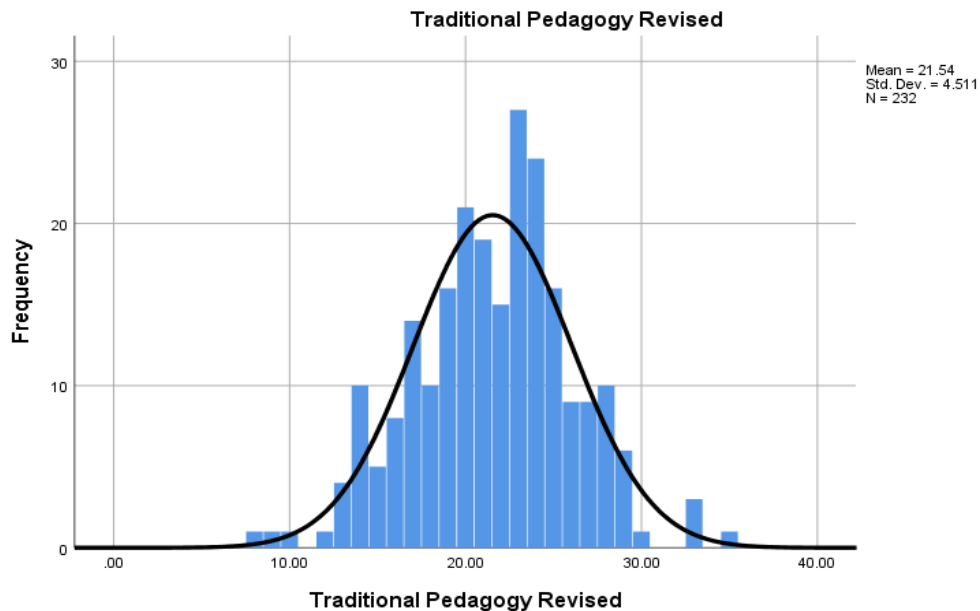
Note. Cronbach's Alpha .723; Factor loadings over .4 are highlighted in bold.

******Item 15 was included even though it did not reach the .4 cut off as it fitted theoretically

A visual inspection of the dataset using a histogram indicated that the dataset was normally distributed. See Figure 30.

Figure 30

Histogram Factor 2: Traditional Pedagogy



However, the Kolmogorov-Smirnov test ($p < .001$, Kolmogorov-Smirnov $Z = .084$) indicated otherwise and the data were treated conservatively as not normally distributed. Table 12 contains descriptive statistics (frequencies) for the seven Traditional Pedagogy factor items.

Response patterns reflect the complexity of attitudes about pedagogical approaches. Seventy-three per cent of respondents strongly disagreed or disagreed with Item 1, *The curriculum should be arranged according to subjects*. Fifty per cent strongly disagreed or disagreed with Item 7, *The teacher should be a strong authority figure in the classroom*. This is indicative of a progressive view of pedagogy. Further investigation of what ‘authority’ means for these respondents is required, as respondents gave seemingly contradictory responses to other items. For example, 48% of respondents strongly agreed or agreed with Item 2, *Demonstration and recitation are essential components of learning*. Sixty-eight per cent agreed or strongly agreed with Item 3, *There are essential skills all children must learn in school*. Slightly more, 76%, agreed or strongly agreed with Item 6, *There are essential pieces of knowledge that all children should know*.

Table 12*Traditional Pedagogy Item Frequencies*

	Strongly disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly agree	
	n	%	n	%	n	%	n	%	n	%
1. The curriculum should be arranged according to subjects	97	42	73	31	47	20	8	3	7	3
2. Demonstration and recitation are essential components of learning	19	8	32	14	71	31	67	29	43	19
3. There are essential skills all children must learn in school	8	3	20	9	48	21	78	34	78	34
4. Children need close supervision at all time	63	27	78	34	65	28	20	9	6	3
5. Factual knowledge is an important component of any learning	6	3	26	11	73	31	84	36	43	19
6. There are essential pieces of knowledge that all children should know	5	2	10	4	39	17	96	41	82	35
7. The teacher should be a strong authority figure in the classroom	48	21	67	29	74	32	34	15	9	4

While these statements might at one level seem contradictory, at another level, given that FS involves high risk activities, such as tool use, fire-making and foraging, the importance of knowing the correct procedures and technical skills associated with these kinds of activities in nature cannot be underestimated. The knowledge and skills associated with this awareness can sit alongside a pedagogical perspective that trusts children to be able to manage their own learning. That is not to be confused with authoritarian, binary perspectives, such as subject demarcation or authoritarian teachers. If this is the perspective being expressed, then it is not surprising that 61% strongly disagreed or disagreed with Item 4, *Children need close supervision at all times*. Similar complexities arise in the third factor, risk and learning outdoors discussed in the next section.

The relatively high level of responses in the neither agree nor disagree category, at between 20% and 30% for most items, reflects the complexity of pedagogical relationships and understanding. Context may also play a role here. The response pattern may also indicate lack of familiarity with some of the ‘technical’ or professional language of education, given that not all respondents were from a teaching background. The scale from which these items were drawn was originally designed for secondary school teachers.

7.5.3 Factor Three: Risk and Learning Outdoors

The third factor was developed from the ten Likert items associated with risk and learning outdoors. The exploratory analysis is contained in Appendix T. At the conclusion of the exploratory analyses, a single factor unrotated solution was sought. EFA using Principal Axis Factoring was carried out on these items. The KMO value was .742, regarded as good (Field, 2009, p. 647) and the Bartlett's test of sphericity (Bartlett, 1954) ($p < .001$) was ‘highly significant’ (Field, 2009, p. 660) indicating that the use of EFA was suitable. The final factor items are highlighted in bold in the factor matrix. See Table 13.

Table 13*Summary of EFA for Risk and Learning Outdoors Items.*

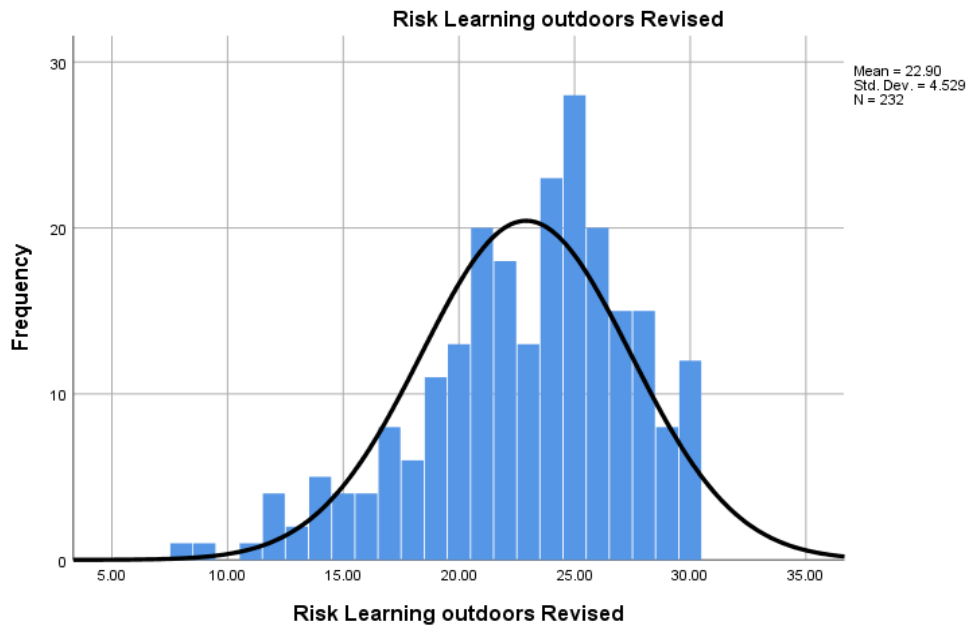
Item	Factor	Factor	Factor
	1	2	3
1. *It is important that an adult can see every child at all times	.656	.544	
2. *It is more difficult for staff to manage behaviour out of doors than indoors	.452		
3. Children should be allowed to climb trees if they feel safe doing so	-.451		
4. *I would be concerned if a child was out of sight of an adult	.725	.344	
5. *If children use tools it is important they are not sharp	.725		
6. Children can be taught to use knives as part of outdoor education from an early age.	-.689		.395
7. I don't mind children getting muddy and wet	-.326		
8. Children who are allowed to take risks at a young age will take risks as teenagers			
9. When they are walking off the school grounds, children should hold hands	.306		
10. Children learn best when indoors in a controlled environment			.329

Note. Cronbach's Alpha .763; Factor loading over .4 in bold; *Item reverse scored

The maximum score was 30 and the higher the score the less risk averse the respondent. These six items were summed into a factor called Risk and Learning Outdoors. This factor was tested for reliability using Cronbach's alpha (Cronbach, 1951) and was found to have a level of .763, a level that is acceptable (Field, 2009). On inspection of the histogram, it appeared normally distributed. See Figure 31.

Figure 31

Histogram Factor 3: Risk and Learning Outdoors



However, the One-Sample Kolmogorov-Smirnov test indicated that the distribution of the responses to the risk and learning outdoors factor across the sample was not normally distributed ($p < .001$, Kolmogorov-Smirnov $Z = .117$). The data were treated conservatively as not normally distributed.

Frequencies for the Risk and Learning Outdoors items are presented in Table 14. The respondents describe a view of children as confident and capable in the outdoor setting. Eighty-nine per cent agreed or strongly agreed with Item 3, *Children should be allowed to climb trees if they feel safe doing so*. Similarly, strong agreement or agreement with Item 6, *Children can be taught to use knives as part of outdoor education from an early age*, was expressed by 78% of the respondents. Seventy-one per cent strongly disagreed or disagreed with Item 5, *If children use tools it is important, they are not sharp*. Regarding management of behaviour outdoors, 71% disagreed or strongly disagreed with Item 2, *It is more difficult for staff to manage behaviour out of doors than indoors*.

Table 14*Risk and Learning Outdoors Item Frequencies*

Item	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree	
	n	%	n	%	n	%	n	%	n	%
1. It is important that an adult can see every child at all times	39	17	72	31	53	23	36	16	32	14
2. It is more difficult for staff to manage behaviour out of doors	104	45	60	26	33	14	25	11	10	4
3. Children should be allowed to climb trees if they feel safe doing so	3	1	6	3	18	8	60	26	145	63
4. I would be concerned if a child was out of sight of an adult	32	14	66	28	62	27	51	22	21	9
5. If children use tools it is important they are not sharp	88	38	76	33	44	19	15	6	9	4
6. Children can be taught to use knives...from an early age.	7	3	14	6	29	13	66	28	116	50

However, there was a higher level of ambivalence regarding Item 1, *It is important that an adult can see every child at all times*, and Item 4, *I would be concerned if a child was out of sight of an adult*. Approximately a quarter of respondents expressed the view that they neither agreed nor disagreed. This may be due

to lack of experience working with children; alternatively, it could reflect given the high level of concern around child protection issues and increased surveillance of Irish children's lives more generally in society (Kernan & Devine, 2010; O'Keeffe & O'Beirne, 2014). Context may also play a role here, similar to the Traditional Pedagogy factor. One respondent wrote³⁷:

I found some of the questions difficult to answer as they would be very much dependant on situation. For example, children out of sight – would depend on who goes out of sight, what environment they're in, how well they know it, how their behaviour is, what they were doing before, how well I know them etc.

7.5.4 Differences Between Grouping Variables

Differences between the respondents' response patterns to the three factors were explored on three grouping variables, using the Mann Whitney U test (Field, 2009). This test was used as the dataset was treated conservatively as not normally distributed.

Bay School and All Other Respondents

The first grouping variable was Bay School (n=32) and the rest of the respondents (n=200). On the Nature Connection Factor, no differences were found between those working in Bay School and the rest of the respondents, although the median score (M) of the FS community (M = 47) was higher than the Bay School respondents (M = 46). This confirms the overwhelmingly positive views expressed in the qualitative responses regarding the importance of environmental awareness and nature connection for these respondents and echoes their view of its importance in childrens' lives.

On the Traditional Pedagogy Factor, Bay School scored more highly on the traditional pedagogy scale (M = 23), indicating a more traditional pedagogical view than the rest of the respondents (M=21) ($P < .05$, Mann-Whitney U = 2166.5, $Z = -2.940$). This effect was of small/medium strength ($r = 0.193$).

On the third Factor, Risk and Learning Outdoors, Bay School respondents were more risk-averse in their views about risk and learning outdoors (M = 22) than the rest of the respondents (M = 24) ($P < .05$, Mann-Whitney U = 2,444, $Z = -2.151$). This was a small effect ($r = 0.141$).

FSLs and All Other Respondents

A second series of analysis examined differences between respondents who were FSLs (n = 103) and those without FS qualification (n=129). Differences were

³⁷ This comment was included in a final question 'Any Other Comments'

found on all three factors for this grouping variable. On the Nature Connection Factor, FSLs were more pro-environmental ($M = 50$) than those without FS training ($M = 45$) ($P < .001$, Mann-Whitney $U = 4120$, $Z = -4.975$). This was a medium effect ($r = 0.327$).

On the Traditional Pedagogy Factor, FSLs were more progressive in their pedagogical views ($M = 20$) than those without FS training ($M = 23$) ($P < .001$, Mann-Whitney $U = 3986$, $Z = -5.247$). This effect was of medium strength ($r = 0.344$).

Thirdly on the Risk and Learning Outdoors Factor, FSLs were less risk-averse in their views about risk and learning outdoors ($M = 25$) than those without FS training ($M = 21$) ($P < .001$, Mann-Whitney $U = 3046.5$, $Z = -7.102$). This was a medium /large effect ($r = 0.466$).

FSLs in this study are more progressive in their pedagogical views, they are less risk-averse and they displayed higher scores on nature connection. These is important, given the less progressive, more risk averse and lower pro-environmental scores of the Bay School respondents and of those working in primary school contexts more generally, as discussed in the following section. These findings point to an important role for FSLs in supporting schools to deliver progressive nature-based pedagogy.

Primary School Work Setting and All Other Respondents

Differences were found on all three factors for the grouping variable of primary school work setting ($n=121$) and the rest of the respondents ($n=111$).

On the Nature Connection Factor, respondents working in a primary school setting had a lower score on nature connection ($M = 45$). This suggests a more pro-environmental world view was held by respondents working in other settings ($M = 49$) ($P < .05$, Mann-Whitney $U = 4791$, $Z = -3.774$). The strength of this difference was small/medium ($r = 0.248$).

On the Traditional Pedagogy Factor, respondents working in a primary school setting ($M = 23$) scored more highly than the rest of the respondents ($M = 21$) ($P < .05$, Mann-Whitney $U = 4978$, $Z = -3.412$). The strength of this difference was small/medium ($r = 0.224$).

On the third factor, Risk and Learning Outdoors, respondents working in a primary school setting had a lower score ($M = 22$), compared to the rest of the respondents ($M = 24$) ($P < .05$, Mann-Whitney $U = 4943.5$, $Z = -3.480$). This suggests a more confident view of risk and learning outdoors was held by the group of respondents working in other settings. The strength of this difference was small/medium ($r = 0.228$).

7.6 Conclusion

This chapter has described the findings of the national survey carried out during the period September 2019 – June 2020. The inclusion of a national survey in this study was a way to contextualise the Bay School experience within the wider FS movement in Ireland. The survey responded to research question two.

In line with FS internationally, there was particular interest in FS from those working in the primary and early years sector in Ireland, although there is emergent interest across all formal and informal education settings. Almost half the respondents described themselves as working in the primary sector, in different capacities. Therefore, telling the story of the experience and understanding of FS in of Bay School is particularly important given this level of interest from these sectors. At the same time, a diverse group, from within the broader EOE sector, health and social care and the arts responded to this survey. This potentially offers a more inclusive and diverse approach to progressive nature-based pedagogy in Irish education settings that can be realised through making FS more widely available.

Almost half (45%) of the respondents to the national survey were qualified FSLs or completing their training at the time of the data collection. I estimate that this represents between a third and a half of those currently practicing FS in Ireland, so these opinions are representative of the Irish FS community. For many FSLs, facilitating FS is part of their ‘main’ occupation. In contrast to the Bay School respondents, almost all of whom heard about FS through Bay School, a much wider set of influences were at play among the wider FS community. Some of these respondents described a lifelong interest in nature. The FSLs in this study hold a more progressive, pro- environmental world view than other respondents. This suggests an important role for trained FSLs in enabling and supporting FS in our schools.

All of the respondents expressed strong support for learning about nature being part of every child’s upbringing. Three quarters of respondents had participated in environmental activities during the previous year and one third had organised such activities. For the FSLs who responded to the survey, this figure was even higher. In contrast, and somewhat surprisingly, the lowest figures for participation and organisation of environmental actions were from Bay School respondents.

The respondents to this survey demonstrated an in-depth knowledge of the six guiding principles of FS. These respondents described FS as collaborative, experiential, playful learning, in nature, with the adults in the role of facilitator or mentor. This kind

of pedagogical approach was in line with these respondents' descriptions of good teaching in general. FS pedagogy was associated with autonomy or freedom, enabled by playfulness, trust, choice and learner-led pedagogy. FS was seen as a 'safe' place to encounter risk by these respondents. These respondents also indicated distinctly relational perspectives on the interconnectedness of all living things. For them, FS is distinctive from the indoor classroom and from much formal education provision in how it enables progressive, nature-based pedagogy. Both practical resources and a philosophical commitment to this kind of pedagogy were important in establishing FS for these respondents. While the pattern of responses is indicative of the complexity of the pedagogical relationship, the depth and range of the responses reflect a passion and commitment to FS within the emergent Irish FS community that echoes the understanding and experience of FS in Bay School.

Chapter 8: Discussion

The Lifeworld of FS

‘There is nothing mushy about caring. It is the strong, resilient backbone of human life’
(Noddings, 2005a, p.175).

8.1 Introduction

This chapter responds to research question three, regarding the distinctiveness of FS as expressed through the understanding and experience of those who participated in this study³⁸. The first part of the chapter integrates the findings described in the previous three chapters in order to describe the lived experience or the ‘lifeworld’ of FS for these participants. The onerous responsibility for the relational quality of the pedagogical encounter rests with the human teacher. Fidelity to the principles of FS is enabled, or not, by the human teacher in the first instance. This perspective of the lifeworld of FS is prioritised in this chapter.

The second part of this chapter sets out the distinctiveness of FS based on this lifeworld. Can FS be described as caring, relational pedagogy, as set out in chapter two? Does the lifeworld of FS for these participants prioritise caring relationship over fleeting encounter, between child and adult, between peers and between humans and nature, toward flourishing for all? A key tenet of this study has been an exploration of the role nature plays in this relational encounter and how nature is experienced and understood by the human participants in this study.

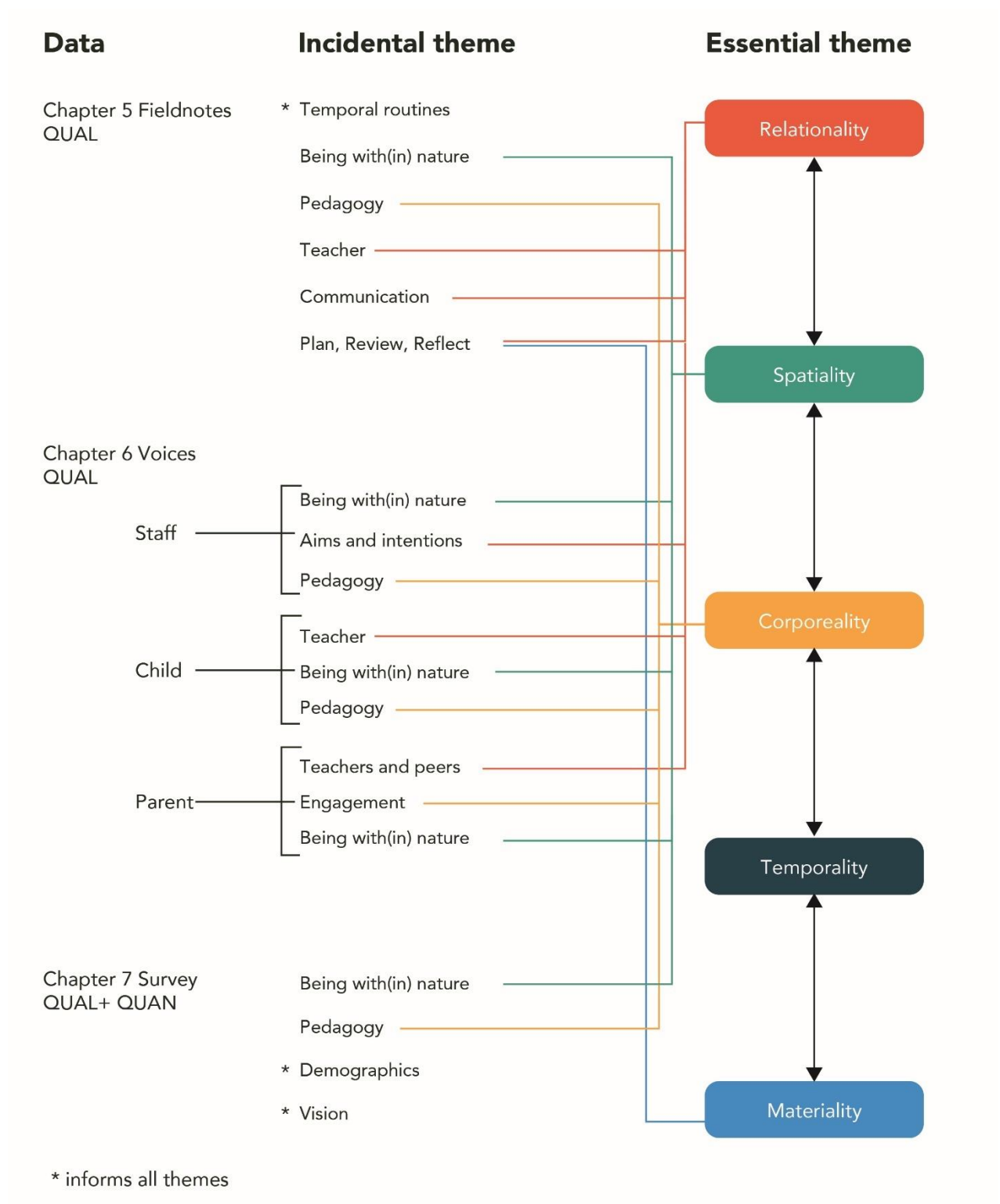
8.2 The Life World of FS

Figure 32, The Lifeworld of FS, sets out how the incidental themes generated inductively in the previous three chapters are considered under five essential lifeworld themes (van Manen, 2016). These are lived relation (relationality), lived space (spatiality), lived body (corporeality), lived time (temporality) and lived things (materiality). In contrast to the other four themes, materiality is notable for its relative absence in the lifeworld of FS.

³⁸ The term participant is used to mean all those who participated in the study, including the survey respondents.

Figure 32

The Lifeworld of FS



Note. Adapted from van Manen (2016).

The incidental themes are set out in the three findings chapters. The coloured lines link these incidental themes to the five essential themes of relationality, spatiality, corporeality, temporality and materiality. The arrows linking the essential themes underscore their interconnectedness in the lifeworld of FS. Temporal routines, demographics and vision are represented in all of the essential themes.

8.2.1 Relationality

Relationality describes the lived relation we maintain with others and otherness in the shared experiences of FS. During FS in Bay School, relationships between the adults are experienced and understood as collaborative. There is a mutual respect for the different roles and strengths of individual adults. Adults share their knowledge with each other in a democratic and inclusive way, both in the woods and in the indoor setting. There is an informality to their communication. Humour, fun and laughter were often heard as the adults interacted. This seemed associated with the wider collaborative culture fostered in Bay School and was not unique to the FS setting there.

This wider culture of collaboration was demonstrated in how FS was supported back in the indoor classroom by other staff and by the school leader. For example, the principal made non-pupil contact time available for planning, review and reflection. She often bade farewell or greeted the FS group as they prepared to go to or return from FS. Teaching colleagues helped out at short notice, making on-the-spot arrangements regarding cover for colleagues to go to review meetings, yard duty or to have a lunchbreak.

The children, too, experienced FS as a collaborative responsive, inclusive learning environment. In FS, there were more opportunities to collaborate with their peers and with the adults than in the indoor classroom. Though the group was smaller, they interacted with a wider group of children and adults than they might on a regular school day, through the physical freedoms extended to them in FS. The children had opportunities to work through misunderstandings and tensions in their friendships and relationships during FS, often without direct adult intervention.

This relationality was supported by a mutuality in the adult and child experiences in FS that is less likely in the indoor classroom (Barfod, 2018). The adults participated in the activities, made nature art, learned how to use the tools, set up the tarpaulins for shelter, shared lunch, sat into the circle and expressed gratitude. When it rained, or it was cold, or there were ants about, everyone, potentially, got wet, or cold or bitten. Adults and children dressed in similar outdoor clothing, wearing boots and

carrying backpacks. The more formal communicative culture of the indoor classroom, for example children seeking permission to leave their seat, or before speaking, did not exist in FS. Rather, informality characterised how the adults and the children spoke to each other in FS. Calling out and shouting to each other by the children (and the adults) was accepted, expected even. This is not generally the case in the indoor setting, often for good reason, to do with large classes, restricted space and the way sound carries indoors. The strong cultural norms of the indoor classroom mitigate against opportunities to build this kind of relationality. The adults and the children described getting to know each other differently in FS. The children mostly addressed their teachers by first names in FS, although they used formal titles in the indoor classroom.

This informality impacted upon behavioural issues. In FS a solution-focussed atmosphere, that was not experienced as judgemental or about being punished, was more likely to prevail. There was a focus on making things work, rather than on what can go wrong. This perspective was actualised in the broad set of personal development intentions which were set out as aims for the FS practice in Bay School. These included life-skills, confidence, wellbeing, social interaction, teamwork, engagement, resilience, self-awareness, motivation and taking responsibility. This stance was echoed by the wider FS community. Words like enthusiasm, supportive, open-minded, dedicated, creative, brave, visionary, a can-do attitude and a shared belief in the ethos of FS were used to describe the kind of mindset associated with FS.

At the same time, this inclusive, collaborative culture was not without its tensions, inconsistencies and complexities, particularly regarding the place of nature in this kind of relational understanding. The adults in this study place a high priority on opportunities for children (and adults) to spend time in nature. This is discussed in greater detail in the essential theme of spatiality. The respondents to the survey, by and large, saw the natural world as a community to which they felt they belonged. They agreed that all of the inhabitants of the earth shared a common life force. They felt part of the natural world, and acknowledged that as humans, we are a part of something greater.

However, the Bay School teachers' expression of those attitudes during FS was more muted³⁹. For these adults, FS was primarily about enhanced social and emotional development for the children. As an end in itself, social and emotional development is

³⁹ The phrase 'Bay School teachers' does not include the FSL in Bay School.

an incomplete and humancentric perspective that does not fully acknowledge the interconnectedness of humans and nature. It does not fully acknowledge the fundamental, existential question of our being in the world, which requires us to see beyond developing our individual capacities (Nicol, 2014). This is the idea of not just considering how walking in a stream feels for us, but thinking too about how the streambed feels our footsteps (Piersol, 2014). That relational, dialogical aspect of being with(in) nature was less often articulated, or maybe not even considered, by some of the Bay School teachers, a pattern echoed in the responses of many of the primary school educators to the national survey. How much more powerful is the pedagogical encounter if nature too is part of this relationship?

In contrast, for the children, and for some of those who responded to the national survey, particularly FSLs, FS is primarily about a relational, dialogical connection to nature that is associated with a visceral playfulness in the woods. The childrens' descriptions of learning in FS evoked a sense of simply being in FS as a powerful learning experience. The children demonstrated a playful and agentic connection with nature. The children played with her, embraced her, talked to her, saw her as agentic. When they jumped in puddles, the droplets of water rose to meet them. The leaves underfoot crunched louder and louder in response to the children's feet. The hills seemed almost to roll too as the children rolled with them, the children (and on occasion an adult) gathering speed and squealing, with joy and nervousness combined, as they rolled over and over, sometimes ending in tears, but mostly in exhilaration.

The Bay School staff were overwhelmed by their witness of the spiritual relationship that some of the children demonstrated towards nature. This feeling of oneness that children (can) experience in nature has been widely discussed in the literature (Bonnett, 2007; Bonnett & Stickney, 2020; Fasting, 2019; Mycock, 2020; Wattchow & Brown, 2011). It was not all spiritual – oftentimes it was boisterous and raucous and rough. There is a sense here of an interconnected ecological whole (Plumwood, 1993) being fostered in FS, evident in the embodiedness of children's participation and engagement in this kind of pedagogy. It was the human teacher who enabled these kinds of pedagogical encounters by offering these choices through FS. But that offer would not be possible without being with(in) nature.

Making time to get to know our local natural places can help teachers to access what these places offer as pedagogical partners. Being 'at work', as the adults are during FS, and in the role of 'teacher', as usually understood, may hinder their

opportunities to experience ‘place’. Yet, in order to develop a relational connection with place we must endeavour to apprentice ourselves to our places (Mannion et al., 2013; Piersol, 2014; Wattchow & Brown, 2011). This enables us to meet Noddings criteria for caring relationships in our schools more fully, predicated on the expressed needs of the relational pedagogical encounter.

These teachers welcomed the opportunity that being in FS made available for a less didactic role; they found it restorative. They experienced what Mannion et al., (2013) described as a less ‘*constrained*’ (p.799) professional identity. This was a chance to be reflective, to participate, to observe, to be, to collaborate, with(in) nature. These experiences are fundamental to enabling adults, as well as children, to respond relationally to the challenges facing education systems raised in this study (Blenkinsop & Fettes, 2020; Jickling et al., 2018; Wals, 2017).

At the same time, these teachers were unsure in these new roles. Sometimes, and for some teachers more than others, it was challenging, as previous studies of FS have described. They felt unsure when to intervene; they did not want to contravene the learner-centred ethos of FS. For others, observation was about monitoring and engaging in a type of surveillance. This aligns with a high level of ambivalence among the survey respondents regarding children being in sight of an adult at all times. Teachers worried about the effect of their feelings of an absence of control in FS and how that might impact back in the indoor classroom. Children did not respond well to didactic teaching in FS, a finding that is supported by previous research (Armbrüster, Gräfe, Harring, Sahraikhiz, Schenk, & Witte, 2016). This sense of a lack of control was not experienced by the FSL in Bay School, to my knowledge, although she was aware of teachers’ concerns in this regard.

In Bay School, there was no sense of a deficit in relationships between the teachers and the FSL that has been described in previous literature, whereby teachers were somehow seen as lacking because they did not fully engage in or appreciate the routines of nature pedagogy (Kemp, 2020; Kemp & Padgen, 2019; Maynard, 2007b; Whincup et al., 2021). The perspectives in the current study were more closely allied with acknowledging that FS pedagogy is different from the indoor classroom for teachers, but also that our understanding of these differences is deepened through our experiences in nature during FS (Davenport, 2019; Kraftl, 2015; McCree, 2019). Noddings (1988) touched on the need that teachers have for support with the complex task of planning for

experiencing relationships of high quality with young people and with adult peers. It is a long-term process that takes time and requires insight and experience.

In Bay School, the FSL supported the teachers in exploring and learning about FS as a pedagogy and how it diverged from the pedagogies of the indoor classroom and enabled a wider and deeper range of progressive, sensory pedagogical experiences. However, she herself was not always explicitly aware that she was fulfilling the role of ‘mentor’. The principal of Bay School highlighted this in her participant validation (See Appendix F). This FSL plays a distinctive role in supporting relational understanding in FS that may not otherwise have been available to these teachers.

Opportunities for both children and teachers to interact with OE providers, such as FSLs, opens up a greater diversity of adults with whom children, and teachers, can build relationships as part of formal schooling (Hovardas, 2016). The FSL can offer a distinctive perspective to the teacher, both in the forest, as mentor-in-action, and as part of the collaborative planning and review process within the framework of the regular learning and teaching activities of the school. This is a key finding in this study and one that aligns with previous research on learning with(in) nature (Blenkinsop et al., 2016).

8.2.2 Spatiality

For all the participants in this ethnographic study, being with(in) nature was *the* single most explicit essential theme of the lifeworld of FS. It was discussed in all three findings chapters. In FS, nature is omnipresent – as a place, a space, a resource, a source of beauty, a challenger, a teacher, a friend, across all the themes discussed in the findings of this study. Being with(in) nature fostered curiosity, empathy, a sense of freedom, self-awareness, offering opportunities for agency, autonomy, choice, relaxation and restoration. Local nature was mostly seen as a ‘safe’ place to encounter risk by these adults. The adults who responded to the survey saw children as confident and capable in the outdoor setting. Mostly they were in agreement that children should be allowed to climb trees if they feel safe doing so. They felt that young children can be taught to use knives and tools properly. For these participants, children’s behaviour was not more difficult to manage outdoors, a finding in contrast to previous research (Glackin, 2018). This may be associated with their pre-existing interest in nature pedagogy (Hovardas, 2016), as well as with the progressive perspective held by the Bay School community in general.

Nature led the way regarding curriculum decisions during FS. Cold days meant lots of active games; wet days meant sheltering closely together; warm days were

associated with relaxation and slowing down. Wind and storms underlined the power and the forces of nature. The appearance of tiny creatures like ants or worms could change the learning plan for the session. Nature provided freedom to move, to sit, to stand, to lie down, to climb, to crawl, to be still, in a way that is not usually available to children (or adults) in the indoor classroom. Nature communicated her presence through birdsong, droppings, the presence of tiny insects, fleeting glimpses of birdlife as they flew, fed, listened, built nests; as leaves rustled and sunlight blinded us or sent shadows, long and short; through raindrops pittering and pattering and occasionally battering; wind singing or howling; branches creaking and breaking and occasionally a dog or a squirrel or a fieldmouse appeared and stayed to play. The forest supported us to be alone, to be in groups or pairs, to be with adults or not, to come together as a whole group, all the while being with(in) nature. Abram (2010) describes the feeling of aliveness and vitality associated with being with(in) nature, a feeling of looseness yet embeddedness, a rightness that is engendered by these types of experiences.

For the children, FS was about learning within, and in relationship with, nature. Their sense of FS as *their* 'place' resonates with the 'place-essentialness' (Mannion & Lynch, 2016) of place-responsive pedagogy. Place-essentialness means that the relational pedagogical interaction could simply not happen elsewhere. These children talked about how they learnt about how humans interacted with nature from being within, and in relationship with, nature. For these children, nature was welcoming and facilitative. As adults, we have to different degrees lost the playfulness of the children's ways of being in the world. Indeed, it seems that schools, as presently structured, contribute to that process, as explored in earlier chapters. A very small number of children described adverse experiences in FS, mostly to do with very specific experiences, like getting stung or very wet or cold. Just one child highlighted the potential dangers of being in nature. This aligns with the relative lack of worry about risks, particularly physical risks, in FS that were expressed by the adults in this study.

This may seem like a romantic view of nature that does not appreciate its powerfulness or its capacity to inflict pain or destruction. There are two salient things to remember here. FS is a nature-based **pedagogy**; pedagogy, of its nature, mitigates risk through its guiding principles of practice. Secondly, almost without exception, nature is universally experienced as restorative, as discussed in chapters two and three. Both staff and children described being in nature as relaxing. Natural environments are associated with less stress, improved mood and restorative effects, which in turn creates more

resilient, engaged learners. Being with(in) the natural environment engendered an expectation that peace and autonomy would be respected. Mostly positive and respectful peer and adult/ child relationships characterised FS (Chawla et al, 2014; Sheldrake et al., 2019). This echoes Nodding's view that in a caring conceptualisation of schooling, classroom and behaviour management is less overt, more intuitive and enables children to manage their behaviour more effectively.

However, complexities did arise. The degree to which this is a place-responsive pedagogy that aligns with the place-essentialness described above varied for individual adult participants. This was echoed in the national survey. Respondents working in a primary school setting had a lower score on nature connection than those working in other settings. As Mannion & Lynch (2016) point out, nature is generally less well understood by humans as agentic. It is more challenging to encounter.

Yet, for Bay School, being with(in) nature enabled the staff there to extend their pedagogical repertoire and to meet the learning needs of the children more fully, even if they themselves did not always fully understand or experience nature as sentient. FS enabled this expression of vulnerability for these teachers, and offered support towards overcoming their concerns. For the vast majority of these participants, FS is an enabling pedagogy that is not otherwise accessible in education systems. FS extends the site of learning from the classroom to include the forest; and in so doing, enables a wider and more diverse range of pedagogical experiences. Moreover, these are potentially transformative experiences that challenge the notion of school. In this view, nature, children, and adults are intertwined in caring relation as curriculum-makers.

8.2.3 Corporeality

Corporeality is to do with how we experience our bodies in FS. FS pedagogy was experienced and understood by the staff of Bay School as holistic, emergent, and novel. For the children, pedagogy in FS was sensory, experiential and 'different'. The preferred approach to pedagogy described by those who responded to the national survey was progressive and experiential learning with(in) nature. Autonomy and agency were key distinctive aspects of FS that were valued by the participants in this study and in particular by the Bay School adults. This all led to greater engagement in learning (Chawla et al., 2014; Mannion et al., 2013; Witte Townsend & Hill, 2006), something particularly noticed by the parents of the children in this study. Taken together, these responses indicate that in FS, both adults and children experience greater autonomy and agency in how they experience their corporeality. For the children this was about

participating in experiential pedagogy; for the adults this was about being able to offer, and to practice, experiential pedagogy.

For the majority of the participants, adults and children, this bodily autonomy and agency in FS was associated with a sense of bodily integrity, a sense of freedom, associated with playfulness, fun, being trusted by, and trusting of, others. It was about experiencing democratic interactions through having choices. Serendipitous moments were noticed in FS and enabled further opportunities for agency and choice to be activated. This approach to pedagogy fostered engagement and ‘flow’ type learning opportunities (Cree & Robb, 2021; Young et al., 2016).

All sensory/bodily interaction is privileged in FS, unlike the typical indoor classroom. So, eating, talking, moving, as well as writing, making, thinking and singing hold equal value as potential learning experiences. Everyone is a learner, adult and child, across all of these dimensions of learning. The same priority is extended to emergent curricular opportunities as it is to pre-planned curriculum content. The adults were at different stages of appreciating that perspective and of integrating it with the indoor classroom. Their understanding grew through their experience of FS. In contrast, all of the children seemed at home in FS from the beginning. Yet they too deepened the intensity of their corporeal experiences over time in FS.

There is an air of enjoyment, happiness and excitement associated with FS that is maintained over time. Being in FS facilitates embodied activity, moving, falling, running. There is autonomy regarding opportunities to regulate my body temperature by moving if I feel cold, to rest if I feel tired, to be alone or to work collaboratively. There is greater access to peers, for both adults and children. Children experience the consequences of their choices, or the choices of their peers – how does it feel to slip on damp ground, to have leaves shoved in your face, to slide down a muddy hill, to manage your body in space. Such a perspective resonates with the ideas of Rousseau (1762). Learning happens as we ripen with(in) nature, through experiencing the natural consequences of our actions. The power of the body to self-regulate when opportunities are extended to children are evident here. This is the kind of embodied activity that supports engagement in learning. Indeed, being able to participate in experiential learning is transformational, given its rarity in practice in western schooling (Breunig, 2005).

The experiential nature of being in FS was demonstrated by the kinds of words the children used to describe FS. These were nouns and verbs to do with food, nature,

weather, tools, physical activity, games, friends and feelings of fun and happiness. I wondered how different these words would be if these children were asked to describe 'school' or 'the indoor classroom'. Two-thirds of the children mentioned teachers in their descriptions and words. These children are aware that relational pedagogy needs the adults. There is a broader interpretation of 'school' at play here that has been discussed in previous research on FS (Armbruster et al., 2016; Kahriman Pamuk & Ahi, 2019). School in this view encompasses what might more often be seen as out-of-school experiences and so FS blurs the lines between formal and informal education.

The processes which underlie findings like these are associated with opportunities for discovery, immersion in positive sensory experiences and engagement in constructive, co-operative, creative activities. This facilitates the development of important protective factors for resilience in the form of feelings of competence and supportive social relationships (Chawla et al., 2014). By promoting competence, autonomy and relatedness, FS enables self-determination and the facilitation of intrinsic motivation, social development, wellbeing and flourishing (Ryan & Deci, 2000). This is the agency, authenticity, mastery and uncertainty that Beames & Brown (2016) associate with place-based learning. People are re-energised by being in natural places and participating in safe, challenging, embodied experiences (Wattchow & Brown, 2011).

But this is not simply about having enjoyable experiences in nature. This is a pedagogical endeavour. It is the integration of sensory experiences, in community and in places, coupled with reflection (Wattchow & Brown, 2011). Skills development and activities in the FS setting are a means to an end, not an end in themselves. Completing a forest walk through brambles and overgrowth or building a shelter is contingent on previous primary experiences supporting us to develop our sensory experience in nature, building our confidence over time (Thorburn, 2018). This kind of learning is associated with diverse outcomes that are unpredictable and so meaning-making requires time, space and social interaction. The teacher trusts the learner and vice-versa. The teacher **is** a learner and vice-versa. In FS, nature is our helping hand at all of these different levels of engagement. Where students have regular and sustained access to these kinds of learning experiences, education is more likely to be meaningful and transformative (Manni, Ottlander & Sporre, 2017).

There was complexity and diversity of pedagogical understanding evident in the findings of this study on these matters. Participants working in a primary school setting

supported more traditional pedagogy than other participants, and held a less assured view of risk when learning outdoors. However, overall, these participants favoured a holistic approach to curriculum delivery. Three quarters of the respondents favoured cross-curricular non-subject based learning. The overuse of procedure and regulation to minimise perceived risk during FS (Connolly & Haughton, 2017) was not evident in Bay School. Rather these findings more closely align with the findings of Barrable and Aravantis (2019) whereby opportunities to experience risk and challenge contribute towards growth.

8.2.4 Temporality

Temporality, or lived time, underpins all of the incidental themes discussed in the three findings chapters. Lived time, in contrast to clock time, is subjective; it speeds up when we enjoy ourselves or when we are engaged on a task and it slows down when we are anxious or bored. Temporality also refers to our temporal way of being in the world. Past, present and future differ depending on the person's temporal landscape, in other words if you are young or old. Past experiences become memories and yet, the past can seemingly change under the influence of the present (Fasting, 2019; van Manen, 2016). Hope and expectations set out a future course for us.

In FS, the journey to the woods took the same route week after week and the temporal routines were predictable. This made for a safe basket in which the 'unpredictability' of experiential learning in nature can proceed. Repeated visits to the forest are a key principle of FS pedagogy. There cannot be too much time spent in FS or too many visits to the forest. This is an aspect of FS practice that has yet to be fully realised in Ireland. The FSL in Bay School, and many of those who responded to the national survey, feel there is a need to spend significantly more time outdoors as part of the school day. For the teachers, to varying degrees, there were fears that the time spent in FS meant that curriculum delivery in the indoor classroom was negatively impacted.

Transitions between the routines in FS seem to be mostly in tune with the 'right' amount of time for those participating, both adults and children. This informal way of transitioning between the routines and rituals of the FS session characterises nature pedagogy, mimicking the cycles of nature. The fragmentation of subjects and timetables in the indoor classroom means that these kinds of transitions are not so easily facilitated there. The exception in FS arises unfailingly when the group prepare to leave the woods and go back to the classroom. It seems as if 'clock' time takes over as the

world of pre-assigned breaks and timetables and subject demarcations comes back into view.

8.2.5 Materiality

Materiality as an essential theme in FS is more fully captured by its absence, in contrast to the presence of the four essential themes already described. In the natural environment, there is an absence of the cultural artefacts of the indoor classroom. On FS days, the session begins in the school building. The group meet in a room where the usual cultural artefacts of school are absent. There are no desks and chairs and the children leave their schoolbags outside. That sets the tone as a kind of transitional ‘edge’ space between the indoor classroom and FS. Material resources, beyond those provided by the forest and those required to ensure safety and basic needs are excluded from FS in Bay School. The exception are the diaries or journals that every child carries and the observation sheets carried by the adults. Technology was mostly absent. The wider FS community described this absence of materiality as a freedom of sorts, a way to free yourself to ‘be’ in the woods, reported previously by Elliott and Chancellor (2014) and described by Christiansen, Hannan, Anderson, Coxon & Fargher (2018) as ‘*naked pedagogy*’ (p.68).

Documentary resources were not fundamental in the way that access to woodland or wearing the appropriate clothing or footwear were essential to safe and authentic FS pedagogy. Similarly, statutory policy requirements to do with adult/child ratios, class size, curriculum delivery or health and safety regulations. While these requirements acted as constraints, these constraints were overcome by agency exercised by the Bay School community and the principal in particular. Wattchow and Brown (2011) describe place-responsive education as ‘*eminently achievable*’ (p. 182), in the sense of not requiring any expensive material investment. The emphasis shifts from ‘things’ to being, to knowing one’s place well and to developing appropriate pedagogic strategies, a more challenging and thought-provoking task. Curriculum-making then becomes a process of attuning to the meanings inherent in the relationships we experience (Ross & Mannion, 2012). The traditional written curriculum is limited (or potentially redundant) in this view. This echoes the view of documentation that the Bay School teachers talked about.

This extends to how progression is understood in FS. In contrast to the more individual and rigid written outcomes focus of assessment and progression more generally used in the indoor classroom, in FS progression was marked by a *felt* sense of

engagement that drew on the adult's intuition about the child's pedagogical experience (Young et al, 2016). This was how the children felt their progression should be attested and noticed. The closing circle and the opportunity to share gratitude, in which everyone participated, adults and children, were used as primary markers of progression in Bay School FS practice. What the children (and the adults) expressed in those circles was accepted as their lived experience. Progression was also captured using images of the session, usually taken by the FSL, and shared with the group afterwards, and often displayed in the indoor classroom. The observation sheets completed by the teachers were also used to record progress and observations, but were seen as less important and sometimes as ineffective. Noddings (2005a) agrees that measuring progression in caring schools is about:

Happy, healthy children; cooperative and considerate behaviour; competence in the ordinary affairs of life; intellectual curiosity; openness and willingness to share; a confessed interest in existential questions and a growing capacity to contribute to and thrive in intimate relation (p. 109).

8.3 FS Being Differently-Recognising Caring

The findings of this study suggest that FS pedagogy is a glimpse of what *could* be, if different ways of knowing were in place in our schools. FS as understood and practiced in Bay School is caring, relational and democratic. This kind of pedagogy prioritises agency and autonomy and self-determination for all. The human moves aside to make room for nature, and the adult moves aside to make room for the child, towards a more inclusive caring relation, towards flourishing. Building such relational pedagogy in our schools is a long-term practice that requires thoughtful and consistent attention to caring relation, beyond the human, as a priority (Blenkinsop & Ford, 2018; Noddings, 2005a).

This is a vision that requires school communities to ask questions about the hegemony (dominant view) of the purpose of schooling. It requires the teacher to ask of themselves what is my role as teacher, and to encourage, and participate with, their school community in pondering these issues. Are teachers' agents of social change or transmitters of current values or both? The task of school is to promote this kind of dialogue within the school community. This is the '*challenge to care*' that Noddings (2005a) calls for, aligned with the purposeful experience (Dewey, 1975) associated with experiential education (Itin, 1999). Breunig (2005) describes this process as '*unsettling*' (p.119). These 'ways of being' are not easily accessed in schools as they are presently constituted. This study suggests that positioning FS pedagogy in this critical, relational

space helps us to define and understand the purpose of education. Positioning FS as radical pedagogy carves out a small space of '*subversion*' (Sackville Ford, 2019, p. 53). As Freire (2017) argues, that there can be no transformation of the world or challenge to oppressive practice without a transformation of the self through dialogue and relationship.

This study suggests that FS pedagogy is generative of relational understanding and can act as a framework for relational caring pedagogy in our schools. This is what Dirkx (1998) describes when he says that we learn about the possibilities of transformative learning through '*engaging both the vision and the process it represents*' (p.11). He too, describes such transformation as about *being*, rather than '*a process of becoming*' (p.11). This is about educators being guided by the overall vision of fundamental change, in a way that influences our practice, our planning, our evaluation and our reflection. Acknowledging that this is a rare occurrence, Dirkx (1998) too sets out the relational nature of this kind of learning: '*Through connectedness with community transformative learning leads paradoxically to a deeper sense of oneself as a person*' (p.10).

In Bay School, there is a congruence between the pedagogy of the indoor classroom and their engagement in FS. FS offered a way to actualise their vision of educational purpose, through progressive, nature -based pedagogy. Its introduction was a pragmatic choice, with transformative potential. Introducing FS enabled Bay School to extend its pedagogical repertoire. It enabled the school community to realise pedagogical experiences which they could not fully enact in the indoor classroom. For the wider FS community who participated in this study, this congruence is often seen as missing in formal schooling.

The introduction of FS was also a vision of what *could* be in Bay School; how relationships could be transformed beyond the human community, a vision that continues to grow as their experiencing and understanding of FS deepens. Taking learning into the forest opened up possibilities for Bay School to embrace nature as co-teacher, to more fully learn with(in) nature, something they had not fully anticipated when they introduced FS.

This study demonstrated that FS enabled the adults and children to experience their relationship with each other in a wider variety of ways than the indoor classroom. It enables them to access more knowledge and understanding about each other. FS therefore maximises opportunities for caring and minimises opportunities to avoid

caring. This is about a commitment to educating (O'Brien, 2011) within the triad of adult, nature and child in our local community. This is what Quay and Jensen (2018) describe as teacher-student-nature centredness. In Bay School, FS is not 'alternative' provision for some children to make up for their 'deficits' as learners, or as a treat, a break from the 'real' business of the school or because it is popular and funded (McCree & Cree, 2017). Rather, it is part of the vision of Bay School as an educating school.

If FS is part of school for everyone, then that changes the culture and the definition of 'school'. This new vision of school is about more inclusive pedagogical practices, where boundaries are blurred between child and adult, professional and volunteer, nature and culture. The first studies on FS drew on this kind of vision, promoting FS as a pedagogy that should be available to all (Murray & O'Brien, 2005). Over time, this vision has been narrowed to fit existing school structures, particularly in the UK context (Leather, 2018). In contrast, Bay School has extended its vision of the place that is 'school' to encompass the forest, through FS.

In Bay School, the school community exercised their local autonomy regarding curriculum delivery by introducing FS. Their model draws parallels with the Udeskole movement in Denmark (Barfod, 2018; Waite, Bolling & Bentsen, 2016). Udeskole draws from a progressive pedagogical tradition, using the local environment to practice holistic and learner-led pedagogy within a national educational culture of academic achievement and testing. Udeskole is a way to deliver the curriculum locally, as a teacher-initiated initiative.

This differs from how FS has developed within primary schools in the UK context. While *bildung* may underpin both FS and Udeskole, Waite, Bolling & Bentsen (2016) suggest that FS in the primary school context in the UK conflicts with the mainstream approach to curriculum delivery⁴⁰. This is interesting because the UK FS movement has been influential in Ireland. However, the findings of the current study suggest that this influence in Ireland is more associated with the principles guiding FS pedagogy, rather than how FS practice has evolved within the UK schools. FS as it is understood by the participants in this study is the place-based OE that Lloyd et al., (2018) call for, albeit supported by FSLs. FS in Bay School supports wellbeing, engagement, belonging and connectedness. It supports the development of a

⁴⁰ Bildung is understood as holistic development of the whole person

relationship with(in) the natural world and it is fully integrated with curriculum delivery.

In Bay School, implementing FS as place-based OE is enabled by a perspective on curriculum that aligns with Aoki (1993), of using ‘curriculum as plan’ as the *basis* for the lived curriculum. This is about being alert as to how the planned curriculum can offer place-based pedagogical possibilities to school communities. This is about learning to listen to the ‘*wisdom of practicing educators*’ (Aoki, 1993, p. 267). We need to reattune the teacher to ‘*giving legitimacy to the wisdom held in lived stories of people who dwell within the landscape*’ (Aoki, 1993, p. 267). The landscape he refers to is the school community. This is an edge space, where there are tensions to be experienced, ambiguity, uncertainty and risk, but simultaneously, vibrancy, generative possibility and hope, a ‘*site of becoming, where newness can come into being*’ (Aoki, 1999, p.181). The teacher, the child and the place, together, create curriculum. The written plan is a starting point, not an end. This is an approach to curriculum implementation that takes its meaning from pedagogy, a view that aligns with the voices of the participants in the current study. This is about activating the six guiding principles of FS in their entirety in the enactment of FS as a pedagogical approach. Indeed, as one of the Bay School teachers pointed out, FS is closer to an ethos, a way of being, that extends beyond life in school.

8.4 FS as Relational Caring Pedagogy

Noddings (2005a) in describing an ethic of care as the main goal of education set out some key priorities which are closely aligned to the aims described by the participants in this study for their FS practice. For Noddings, the aim of education is to produce competent, caring, loving and lovable people. Learning must be relationally constructed; that is, it must be based on an ethic care for myself, each other and our world. Relational caring in our schools requires modelling, dialogue, practice and confirmation. The findings of this study suggest that FS pedagogy does comprise a framework for practicing relational caring in our schools.

However, extending the place we call school to include local nature, through introducing FS, must also embrace the natural world as sentient. How we inhabit a place says a lot about how we sense its worth (Wattchow & Brown, 2011). Explicitly acknowledging the sentience of nature extends Noddings relational caring beyond the humanistic paradigm. The eco-philosophical and post-humanist, place-responsive epistemological traditions that have also conceptually framed this study approach

reciprocity and caring relationality from a more radical perspective. This challenges and advances our thinking on these matters, as it has advanced my thinking on flourishing. Eco-philosophical thinking about reciprocity in education systems is not bounded by a humanistic paradigm, a privileging of the human over nature. Rather, it embraces a listening stance towards the interconnectedness of all species. I believe that both positions, though not seamless, are concerned with, and directed towards, universal flourishing for all, human and nature. The pedagogic challenge to care in this view is to incorporate a reciprocity to all relationships, towards being with(in) nature.

Caring cannot happen in isolation and caring cannot be turned on and off. It is a way of being, of being *occupied*, in the Deweyan sense of being, of wholehearted engagement with the other (Noddings, 2005a). Inquiry, dialogue, reflection and thoughtful response guide a relational ethic of care in education systems (Noddings, 2005a). Taking care of affiliative needs is the priority, so we must relax the impulse to control and in Noddings (2005a) words ‘*Teach them that caring in **every** (her emphasis) domain implies competence*’ (Noddings, 2005a, p. 175), as others within the FS movement have also described (Cree, 2009; Cree & Robb, 2021).

Looking back over the responses of the participants, their role in modelling care is evident. The FSL in Bay School who modelled care for nature in her practice impacted on the understanding and the experience of other adults, as well as the children. Modelling care for myself is about expressing my needs to the group, particularly regarding basic needs outdoors, to do with keeping dry, warm and safe. These children understood the importance of wearing the right gear. Modelling care is about being inclusive towards others in our language and behaviour. It is about offering help and being supportive for close others. Modelling care for distant others is about citizenship, commitment to community and activism. Modelling care for nature is about low impact activity in nature, being appreciative of nature, acting in an ethical way towards the environment and environmental activism. Ultimately, it is about understanding and experiencing the natural world as sentient. This is an aspect of caring that is less well understood and which has been raised in the FS literature (Morgan, 2018; McCree 2019). Modelling care for ideas is about having opportunities to dialogue with others, and to be listened to, in various modalities. These kinds of opportunities enable us to grow in our understanding of nature as sentient.

Practicing FS pedagogy enabled these participants to make meaningful connections between each other and the natural world that would not otherwise have been

possible. FS makes space for the big questions, to do with our being in the world, to be explored in our schools. This is a challenge for us as adults, less so for children. But given the role of the adult in the pedagogical relationship, rising to this challenge is non-negotiable. The challenge is finding ways to reawaken the playfulness of childhood in our daily lives and within our identity as teacher. Over time, and with caring others, such as the FSL in Bay School, we can get better at knowing places and so more comfortable in situating our teaching and learning with(in) natural places, with the benefits that accrue. Building this reciprocal ethic of care requires educators who have a sense of the possibilities in our surroundings; who place value on being present, on noticing, attuning our senses. Of learners too, it requires patience, attention, stillness. FS meets this challenge through providing opportunities towards '*collective modes of becoming*' (Vladimirova, 2021, p.62), towards flourishing.

This endeavour is about making the outdoors a natural place to be as part of schooling (Knight, 2016; Mannion et al., 2013). Waite, Passy, Gilchrist, Hunt, & Blackwell (2016) found that like Bay School, schools most likely to engage with pedagogies like FS were open-minded about trying new things and led by strong leaders. It is no coincidence that those primary schools who have expressed interest in FS in Ireland are from within the ET movement or the 'alternative' school sector, or where there are individual 'champions' promoting this new vision, though not exclusively so. There is a sense here of a bigger picture, which highlights the importance of all schools thinking about thinking about what 'flourishing' in our schools and our lives really means, and how progressive, nature-based pedagogy, like FS, can contribute towards it.

8.5 Conclusion

This chapter provides a rich and insightful picture of FS as it emerges in Ireland. FS enabled these participants to make meaningful connections between each other and the natural world that would not otherwise have been possible. In response to Wals (2017) question regarding the kinds of learning places that promote relationality, belonging and care, FS is one such place. This study suggests that by introducing FS pedagogy, Bay School explicitly set out a vision of their school as primarily about establishing and maintaining caring relationships, with myself, with each other, with the wider world and the world of ideas and with the natural world. In that regard, FS is fully integrated with the indoor classroom in Bay School. These ideas were shared by the wider FS community as the national survey revealed. Participants saw good teaching as collaborative, experiential, holistic, relational and associated with a broad view of

curriculum as lived experience. These participants can collectively be said to value diversity, curiosity, ideas, democracy and an eclectic, emergent approach to planning, teaching and learning and assessment.

There are complex public policy questions bound up in the findings of this study that go to the heart of the purpose of education and of pedagogical practice and which reflect the complexity of life in schools. The importance of opportunities to participate in innovative practice such as FS are highlighted in this study as a means to enable discussions in school communities about how we understand flourishing as an aim of education. This is about bringing our unconscious awareness of the influence of nature upon us to a conscious level in our teaching and living. It is about a sense that yes, nature provides for us through its ecosystems, but more than that, connection to nature, through being with(in) nature is an essential part of a life well-lived.

These findings suggest that FS helps us to express care in the reality of our lived experiences within our school communities. FS can help us to restore an equilibrium in our schools through prioritising relational caring based on the expressed needs, however masked, of all sentient beings. FS is a way to help us to affect our own agency, in our own context, adults, children and nature. This study suggests that FS can impact on how we experience and understand caring relationships in school beyond human relationships, towards universal flourishing for all life forces.

I conclude that the lifeworld of FS for these participants, does indeed comprise a learning community where relational caring (Noddings, 2005a) is practiced and where people and place are connected in purposeful activity (Mannion et al., 2013). That is not to say that these ideas are perfectly formed in Bay School or among the wider Irish FS community who responded to the national survey. Rather, there is a glimpse of a different way of being in our schools. This leads me to conclude that Irish primary schools should consider FS if they wish to make their schools more caring places. This relational caring encompasses the natural world. This is a timely and important conclusion, as we consider ways that school systems and the practices therein can help to heal our damaged world. Humans will have to fundamentally change the way that we live if our earth is to survive the ongoing, existential ecological crisis. That includes making fundamental changes in our schools. One way to do that is to support schools to consider FS as a pedagogical approach.

Chapter 9: Conclusion

‘For in the end, there are no independents; we are all interdependent. And among those who struggle to keep what’s good in the world, there is no outside – or better yet, it is all outside’ (Pyle, 2016, p. 109).

9.1 Introduction

This concluding chapter is written in the context of the ongoing redevelopment of the Irish primary school curriculum. This task is taking place within an Irish public policy framework which, in my view, espouses a vision of universal flourishing that remains incomplete. Achieving universal flourishing is an enormous challenge, given the existential crisis of climate change, the structural inequalities of our world and the aftermath of the Covid-19 pandemic. Nevertheless, education systems and school communities worldwide have an influential and non-negotiable role to play in this endeavour.

The findings of this study suggest that making relational, caring pedagogy more widely available in our schools will help to realise a more complete, indeed transformative, vision of flourishing for our fragile, yet resilient world. The story of FS in Bay School that is described in this ethnography sets out how one school approached this task (of realising relational pedagogy) through their FS practice. These are original findings in the Irish context and provide us for the first time with an in-depth account of the lifeworld of FS pedagogy in Ireland.

This final chapter concludes that story. The chapter begins with a synopsis of the study. The implications of the study are then considered. This is followed by setting out the contribution of this thesis to new knowledge. Recommendations to support the development of FS in Ireland are then outlined in line with the findings. The chapter concludes with a hopeful reflection.

9.2 Synopsis

FS was introduced into Bay School in order to promote better relationships between children and adults (see chapter one) and that remains a guiding principle of FS pedagogy in the school. This decision was a recognition of the importance which the school community attached to building a more caring community and a realisation that this could not be actualised in the indoor classroom alone. The journey taken by Bay School has extended their site of learning, their ‘school’, to include the ‘forest’. The decision to introduce FS reflected an ethical stance aligned with their ethos as an equality-based, child-centred, co-educational and democratically run, publicly funded,

primary school. However, their story also underscores the complexity of this task even for primary schools like Bay School who are situated in the progressive, democratic, indeed critical, space. To date, nature pedagogy has been minimised and ‘othered’ in formal education. This study demonstrates how progressive, nature-based pedagogy can play a transformative role in promoting enhanced wellbeing and flourishing in our schools.

This study set out to describe that experience and understanding in Bay School, with the overall aim of exploring FS as caring, relational pedagogy. The first chapter set out a rationale for the study. The study is contextualised within the Irish public and education policy framework and is based on my own experience of introducing FS in Bay School in 2012. Chapter two set out a conceptual framework for the study based on a relational ethic of care. Framing FS as a relational pedagogy is about prioritising democracy, inviting our communities into partnership in our schools, appreciating nature as sentient and extending the place of school to include local nature, towards making our schools *‘nurturing, thoughtful and just, all at once’* (Greene, 1995, p. 43).

This relational view acknowledges education as a process, a pedagogical journey. We are most likely in different places on that journey and through building relationships and caring for and about each other and the natural world, we will, in community, progress on that journey towards universal flourishing. FS is about a reciprocal sharing of that pedagogical journey with nature. This is a more complete and radical view of flourishing and wellbeing than currently envisaged in Irish public policy. FS is about enabling holistic, experiential teaching and learning, that is thoughtful and purposeful, to be practiced more consistently in our schools. This is not a new idea; the FS movement traces its lineage back to Rousseau (1762). But it is a complex task that requires us to explicitly set out what it is we are trying to achieve by introducing pedagogies like FS into our schools.

Chapter three examined the research literature on FS in order to demonstrate its potential as caring, relational pedagogy. This chapter focussed on the empirical research that addressed wellbeing and nurture in FS settings. The emergence of the modern FS movement around the world is indicative of a yearning towards making our schools more caring places, although some argue that this founding ideal has become lost and commodified as the FS movement has grown. More recently, insights from those who have written about education within indigenous communities have informed FS

practice, particularly with regard to connection with(in) nature, relationship with the land and the role of elders as teachers in their communities.

The methodology is set out in chapter four. Ethnography as a methodological choice aligns well with the exploratory nature of the research, a novel scoping of the Irish educational landscape through telling the story of FS in Bay School. A national survey of adults in Ireland was used to contextualise that story. This was a methodological decision in keeping with the foundational nature of this research as the first PhD to investigate FS pedagogy in the Irish context. That is the extent of the study. This study is not designed to produce generalisable findings, but it does provide rich insights that can be considered by others in exploring FS pedagogy. My own positionality is set out clearly throughout and the validation strategies described in detail. My ‘insider’ status often gave me pause for thought during the past four years. I was constantly aware of how the study would be different if I did not have some shared history with Bay School and the Irish FS movement. On the other hand, I am part of that story. Conclusions, in that sense, will always be somewhat incomplete and for others to judge.

What is clear is that initially, for me, FS started out as an intervention to promote better relationships in one class in Bay School. Over the past ten years, that experience developed into a much bigger project that changed me. I have extended my understanding of flourishing to explicitly seek out and notice nature’s voice in my life. I am alert to the powerful role that being with(in) nature **must** play in education systems going forward if universal flourishing is to be realised as a goal of education. This flourishing is about a life well lived for all, human and nature, in community. This is a lofty goal and will be challenging to achieve. This academic study has intensified and deepened that belief. My journey is echoed in the experience and understanding described in this study.

Three research questions guided the study:

1. How is FS pedagogy experienced, and understood, in Bay School, the first Irish primary school to adopt this pedagogical approach?
2. How is that experience and understanding contextualised within the understanding of the wider Irish FS community?
3. What is the pedagogical distinctiveness of FS according to the participants in this study?

The findings were described over four chapters. Chapters five, six and seven presented the different voices of the participants: my own, the staff, the children and their parents and the wider Irish FS community. Chapter eight interpreted these findings to describe the lifeworld of FS. For these participants, FS is indeed a caring, relational pedagogy that is predicated on being with(in) nature. FS is an experiential pedagogy, associated with democracy, dialogue, humour, flexibility, collaboration, freedom, fun, ownership, autonomy, authenticity, engagement, creativity, learning and physicality. FS is understood and experienced as an inclusive pedagogical place. FS in Bay school is facilitated by a reflective, collaborative culture within the Bay School community. The Bay School community articulate their vision for FS on an ongoing basis and make available the required practical and human resources to implement that vision.

The findings of this study suggest a distinctive role for FSLs in supporting schools who wish to engage in FS pedagogy. This applies even in progressive contexts such as Bay School who are committed to extending their pedagogical repertoire to include nature-based pedagogy. The FSLs who participated in this study described an ongoing and deepening sense of nature connection in their own lives which they wished to share through FS pedagogy. They demonstrated their commitment through their engagement and activism in socially progressive environmental and educational movements. This potentially represents an inclusive and diverse perspective on enabling relational caring through nature-based pedagogical practice that is missing in Irish primary schools.

FS enabled the Bay School community to make meaningful connections with(in) nature that would not otherwise have been possible. Participating in FS helped these participants to refine their vision of this kind of pedagogy and to explore new directions in their pedagogical practice. These findings suggest that the story of FS in Bay School can act as an exemplar for other education communities who wish to explore relational, caring pedagogy with(in) nature. In Bay School, FS is an expression of a care ethic, rather than a way to introduce one. For settings where there isn't such congruence, then introducing FS may be a way to explore these issues further. The following section sets out the wider implications of these findings.

9.3 Implications

Praxis

FS in Bay School and as understood by the Irish FS community represents a distinct move away from the learner / teacher relationship as an instrumental one, one

where the adult instructs the child (the ‘banking’ model described by Freire), to a model where the adult and the child co-construct the learning together with(in) nature, potentially leading to distinctive opportunities for the children and the adults to care for each other and for their world. It is a vision of educational purpose that is about who we are in the world. FS as practiced in Bay School and as understood by the Irish FS community is about a praxis-oriented approach to pedagogy in our schools.

This approach to pedagogy is about problem-posing, in contrast to the primacy afforded to problem- solving in western school systems. This kind of pedagogy is predicated upon a relational stance. The teacher becomes the teacher-student and the students become the students-teachers (Freire, 2017). The more sophisticated knowledge of the teacher is remade in light of praxis with the student. This is a transformative view of socio-cultural pedagogy. This is the dialogue Noddings (2005a) describes as fundamental to a relational ethic of care. Agency, voice and autonomy are actualised through having these kinds of pedagogical interactions. This requires a high level of moral and pedagogical commitment to relationship building in our schools. This was something that was abundantly evident in the responses of participants to this study and in my own observations during the study. Such pedagogy promotes reflective practice as integral to the learning episode, whereby expectations for the sessions, and how best these might occur in the particular setting are set out, reviewed and reflected upon, by all the participants. Praxis is about individual school communities thinking about their own response to the question of making more relational caring pedagogy available in our schools. It is about considering ways to disrupt and reimagine the powerful cultural institution of school. It is a commitment to being open-ended, open to possibilities and new beginnings (Greene, 1995). It is also a commitment that extends beyond one setting towards consideration of the meaning of education and the purpose of schooling more generally.

Being with(in) Nature

Being in FS extends this praxis to the natural world. Opportunities to include the natural world in a relational ethic of care are provided by, and exercised in, FS. Confirmation, as discussed by Noddings (2005a) and others is the essence of the relational understanding. Confirmation is what confirms the expressed need of the other, the sense that another sentient being understands something about me and my response indicates affirmation (or not) towards growth and relationship. Confirmation supports my care for close others through experiencing the difference I can make to

another from the response they offer. Nature offers response in abundance, as the children in Bay School demonstrated in their diverse and wholehearted engagement in FS. These kinds of relational experiences in nature can help us to approach human relationships in more caring ways. This is about practicing, in Noddings (2005a) words, or apprenticing ourselves to the outdoor place (Wattchow & Brown, 2011) to begin to ‘feel’ the important stories that must be shared. This approach to pedagogical practice helps us to bring the rational and the sensory into balance. This practicing was how the adults in Bay School explored the ways in which FS pedagogy impacted on their identity as teachers. FS offered the children opportunities to practice exercising their own agency to ‘be’. This understanding of the potential of FS was confirmed by the responses to the national survey. This task is about building authenticity in relationships in our education systems (Freire, 2017). Offering, and being offered, challenges, choices, feedback, support and encouragement from peers and adults with(in) nature can mean those learnings can be transferred from the forest to the classroom and beyond.

Pedagogical Vision

Where schools have engaged with OE, they generally want to continue and expand this kind of pedagogy (Barfod, 2018; Glackin, 2018; Waite, Passy, Gilchrist, Hunt, & Blackwell, 2016). Participating in FS for the participants in this study was empowering, hopeful and even transformative. FS opened up a new way of being for these participants and the genie cannot be put back into the bottle. These findings are echoed in the empirical studies explored in this current study. Even in schools where there is dissonance between the pedagogy of FS and the practice in the indoor classroom, that dissonance can, in its way, promote changed practice towards the kind of pedagogy described in this study. This is particularly the case if there are individual ‘champions’ who see things differently. Encouraging school communities to articulate why they do, what they do, the way they do, may over time lead to a more transformative engagement with progressive nature-based pedagogy like FS. Opportunities to participate in reflective practice, to collaborate, to experience autonomy, to innovate, to fail, to try again, to practice and to experience experiential, holistic pedagogy all underpin this kind of progressive pedagogy in action. Developing nature-based pedagogy is about thinking outside the box, imagination, commitment, relationship building and community. Curriculum and policy are a starting point, not an end.

However, teachers need to be supported to imagine themselves as part of innovative pedagogy like FS. Blenkinsop, Maitland & MacQuarrie, (2019) describe a muted response from the teachers to their proposed '*dreamworld*'. The greatest challenge to making more opportunities available in schools to practice FS may come not from explicit policy, but from the layers of '*implicit*' policy (Blenkinsop et al., 2019, p.492), the way it has always been done. Champions, commitment, luck, research involvement and teacher training are all important (Blenkinsop et al., 2019). That is not to dismiss the importance of practical support; this too, is essential to enacting FS with fidelity, as was recognised by the Bay School community. But there are no templates for this kind of work. As Thorburn (2018) points out, Dewey doesn't offer a '*curriculum toolkit*' (p.32), rather encouragement towards greater imagination and engagement in learning. This kind of place-conscious pedagogy can flourish and redefine schooling from within. However, this transformative task will depend upon: '*building local collaboratives of diverse people, in and outside schools, who care about their places and who can help others learn to pay attention to, understand and care for the places they inhabit*' (Gruenewald, 2005, p. 281). This study suggests that FS can help us to (re)gain the momentum towards our schools as caring places where relationship is fundamental.

9.4 Contribution to Knowledge

This study has provided the first comprehensive study of FS in Ireland at doctoral level. It will serve as a foundational study of FS in the Irish context. It lays an empirical foundation for FS practice in Ireland as a progressive, nature-based pedagogy that is predicated upon a relational ethic of care.

The study sets out for the first time how FS is understood and experienced in the Irish primary school context through telling the story of FS in Bay School. This contribution sets out how FS works as relational pedagogy in their school and demonstrates how one school extended their pedagogical repertoire to include local nature by introducing FS.

The study extends the international body of research on FS. It is a very significant contribution to the tiny extant Irish research literature on FS. It also adds to recent studies on an ethic of care and caring relationality to include care for, and of, nature, for our wellbeing and flourishing, and for the wellbeing and flourishing of our world.

The study makes an original contribution by examining FS pedagogy through the lens of relational caring, using a contemporary, interdisciplinary review of the theoretical literature. That choice of conceptual framework and literature enables the study to contribute a different perspective on how wellbeing and flourishing can be achieved in Irish primary schools. This is a transformational public policy vision of wellbeing and flourishing in our schools, aligned with a progressive Freirean and Deweyan ideal. The findings suggest making FS more widely available will help to ensure that progressive, experiential pedagogy can be more fully (re)ignited in our schools. This in turn will enable our schools to prioritise caring, relational pedagogy with(in) nature.

This study provides an important empirical contribution to the current redevelopment of the Irish primary school curriculum through its ethnographic exploration of how FS works as relational, caring pedagogy. In particular, the study provides new evidence in the Irish context of how FS can support self-determination, autonomy, engagement, wellbeing and flourishing, alternative possibilities for teachers to express themselves professionally and community involvement (through the involvement of FSLs and local places) in our schools.

Crucially, this study extends our understanding of the important role of the natural world in enabling us all, human and nature, to live well on the earth. This research demonstrated that participating in FS can enhance our understanding of the sentience of the natural world. This study provides evidence of how we can make local nature an ordinary place to be, as part of the school day, towards a more inclusive and sustainable world for us all. This is an important contribution to the Irish public policy frameworks on sustainability that cannot be ignored.

Methodologically, this study is innovative in presenting an ethnography that is contextualised with a national survey. The challenges of managing the integration of the different epistemological approaches associated with qualitative and quantitative data in an ethnographic study were successfully resolved in the design decisions explained in chapter four. The study offers a comprehensive account of how to present the different voices, using both words and numbers and drawing from multiple sources, in an ethnographic study. The multiple methods of data collection provided not only for triangulation, but also a more comprehensive analysis of the experience and understanding of FS held by these participants. The study also demonstrated the effective use of parametric statistics and EFA to contextualise the ethnography. The

design enabled both convergent and divergent findings to be considered. This approach to the design of the study may be useful for others to consider. This innovative approach extends to the presentation of the findings. The narrative description of FS provided in chapter four provides a unique snapshot of FS pedagogy in the primary school context that will be helpful to practitioners and researchers alike.

9.5 Recommendations

Education and Training

Opportunities to explore progressive nature-based pedagogy, such as FS, in initial teacher and early years education and as part of CPD for all educators are essential for incorporating caring pedagogy, such as FS into our primary schools. There is a place for modules on FS and progressive OE on all initial teacher and early years education courses and CPD for education leaders, support staff, parents and school and early years communities in general. All of these proposed initiatives must also promote a wider praxis of caring, dialogue and relationality (O'Brien, 2021), not just within the more traditional human development frameworks but across the curriculum and in particular in the STEM education arena.

Exemplar FS practices on college and university grounds can serve as teaching sites, research sites and exemplars of best practice. Exemplar sites can also be used to provide CPD for educators, thus maintaining a link between theory and practice. This proposal responds to the continuum of professional development from initial teacher education across the teaching career envisioned by The Irish Teaching Council in their Cosán Framework (The Teaching Council, 2016). Knight (2016) highlights the work of the School of Education in Cardiff Metropolitan University which supports an outdoor learning hub and FS practice locally. FS leadership training is provided for local teachers and communities and all teacher education and early years students receive introductory FS modules as part of their undergraduate studies. Loughborough University in the UK also promotes FS through its sustainability initiative. Part of their vision is to share the natural sites on their campus with the local community.

Policy and Curriculum Development

Policy makers are adrift of practitioners in their understanding of what it takes to translate policy into practice, as explored in chapter one. The philosophical and practical supports to enable teachers to be agentic and to practice their craft with integrity, in line with the espoused vision of flourishing for all, must be provided. The present study supports the implementation of the recommendations of the Heritage

Council (Kilkelly et al., 2016) regarding the development of a cross-government policy on children and the natural environment that is informed by an inclusive, childrens' rights framework. This recommendation echoes Grey and Martin (2012) in their call for a mandate for every child as part of their formal schooling to '*experience the natural world, based not on a scientific or sociological study, but on direct, visceral and personal engagement with nature*' (p. 46). This is relevant when we consider that for over 70% of the teachers in a recent Irish study, the key resource for their nature study lessons was the interactive whiteboard, which had in turn taken over from the textbook (Madden, 2019).

The present redevelopment of the Irish primary curriculum can contribute to meeting this recommendation through promoting a wider suite of time allocation during the school day; making available more time for staff to engage in relational pedagogy through providing more non-pupil contact time and supporting schools to access natural places in their community during the school day.

Primary school design guidelines should facilitate progressive nature-based pedagogy. More explicit guidance is required, going beyond landscaping towards encouraging more imaginative play (DES, 2013) and the optional promotion of biodiversity and 'wild' areas (DES, 2017b).

The ongoing implementation reviews of the STEM Education policy (DES, 2017a) and the DES National Strategy on Education for Sustainable Development (2014-2020), and the updating of the DES policy framework on wellbeing, must not miss the opportunity to promote wider access to, and understanding of, progressive nature-based pedagogy such as FS in Irish schools. In Scotland, for example, OE is a key pillar of the Scottish Learning for Sustainability policy (Scottish Government, 2012). Learning related to global citizenship, outdoor learning and sustainable development are brought together towards transformative learning in every school in Scotland. This is a unique and innovative approach (Christie, Higgins & Nicol, 2016) towards the kinds of positive and transformational educational experiences Souza, Wals, & Jacobi (2019) maintain are essential for future growth and flourishing. This is an approach that should be considered in Ireland, based on the findings of this study.

Community Collaboration

The importance of establishing and maintaining links with local and national organisations is underlined in this study. Like individual school communities, these organisations will be at different stages in their journey towards supporting flourishing

through progressive nature pedagogy such as FS. Establishing relationships and partnerships in the Irish context means moving beyond the somewhat piecemeal and haphazard programmatic level of engagement that presently exists between locally driven but nationally supported environmental education, sustainability and wellbeing initiatives.

The absence of regional or local education structures in Ireland, which can provide for more focused local needs, is problematic. However, building links between schools, communities and relevant national state-funded organisations locally is essential for integrated quality provision of FS across Ireland. Organisations such as Coillte Nature⁴¹, the National Parks and Wildlife Service⁴², The Heritage Council, The Forestry Service⁴³, city and county councils and voluntary NGOs like IFSA and other relevant local organisations have a key role to play here. Public adventure education centres could also play a wider role in the provision of FS in our primary schools.

The model used by Natural England (Waite, Passy, Gilchrist, Hunt, & Blackwell, 2016) may be one to explore in Ireland. This is a model of providing funding for training, providing central mentoring and support, carrying out standardised monitoring and evaluation of FS towards long-term and sustainable provision. A key aspect of the success of this project was an emphasis on local flexibility, to support schools to embed LINE across the curriculum.

Scotland, long regarded as a leader in the provision of OE provides a different model. Outdoor and Woodland Learning Scotland is supported by Scottish Forestry and evolved out of the Forest Education Initiative. Training for teachers and TAs was introduced in 2011. This training is funded by Forestry Commission Scotland and the Scottish Government. A similar model is promoted in the North of Ireland through partnerships between the Northern Ireland Forest School Association and the local education and parks authorities there.

In Scotland, the promotion of FS is also supported by wider statements on the importance of OE for all. The Curriculum for Excellence in Outdoor Learning

⁴¹ Coillte Nature is the not-for-profit branch of the Irish state forestry service. <https://www.coillte.ie/coillte-nature/coilltenature/>

⁴² The National Parks and Wildlife Service (NPWS) is an Irish government agency whose mandate is to manage, maintain and develop State-owned National Parks and Nature Reserves. <https://www.npws.ie/>

⁴³ The Forest Service is responsible for ensuring the development of forestry within Ireland <https://www.gov.ie/en/publication/642e6-forestry/>

(Learning & Teaching Scotland, 2010) framework sets out how the curriculum can be delivered through OE. The present study recommends a similar suite of documents to accompany the re-envisioned Irish primary curriculum.

FS has much to offer those who are disenfranchised by the prevailing structures, particularly communities living with disadvantage. We know that community involvement and local engagement is essential for successful interventions and FS has demonstrated that it can offer positive outcomes in this regard. One community-led model is the partnership between the Sylva Foundation and the FSA in England under a project called Forest School for All (<https://www.sylva.org.uk/forestschoools>). Projects are being established in communities across England with the aim of bringing all young people in closer contact with nature. Similar models with relevant organisations could be explored in Ireland alongside the recent expansion of the Delivering Equality of Opportunity in Schools Scheme (DEIS) <https://www.gov.ie/en/policy-information/4018ea-deis-delivering-equality-of-opportunity-in-schools/#deis-plan-2017>

Finally, I include here a role for individual ‘champions’ for change. This study has demonstrated the crucial role that activism can play in enabling change. The emergence of the contemporary FS movement was a rallying call for change in education systems from individuals in the first instance. Their activism enabled a fresh eye towards removing the layers of policy and politics that have obscured the theoretical ideas of progressive theorists and the lived experience of our forebears across the generations. Each one of us has a responsibility to use our voice and to help other voices to be expressed and confirmed within our schools and our communities. From tiny acorns grow mighty oaks.

9.6 Future Research

This study has provided the first comprehensive study of FS in Ireland at doctoral level and serves as a foundational study. There is a small, emergent FS literature based on the Irish context (Murphy, 2018; Murphy, 2020; Egan, 2020). This study also sits within the small compendium of recent Irish doctoral studies which promote nature connection in Irish education from the perspective of environmental education (O’Malley, 2014) nature studies and school gardens (Madden, 2019) and public outdoor education centres (Pierce, 2020).

Other ethnographic studies in different school, early years and home school settings will enable comparisons and contrasts to be drawn with the present study and so

deepen our understanding of how FS is understood and practiced in Ireland in its emergent phase.

FS is vulnerable to becoming the next ‘must do’ trend in education, with the post Covid interest in learning outdoors. This interest may potentially be underpinned by an instrumental imperative rather than a pedagogical vision. Further investigation and exploration of innovative ways to integrate FS with existing structures, or not, is required.

Longitudinal research of FS in Ireland assessing its impacts and benefits would be welcome. Similarly, comparative studies of FS in different settings with different age groups and cohorts are also required.

An exploration of the understanding of place, of woodland management and of ecology in FS practice in Ireland, and where that sits within our rich heritage as a predominantly rural economy (until quite recently), our colonial past and our attachment to stories of the land, is urgently required.

An in-depth analysis of FSLs experiences in delivering FS would build on the national survey conducted as part of this study.

Childrens’ views and parents’ views about FS, while considered in this study, were not the primary focus and were not explored in the rich level of detail that they might be in another study.

Finally, as Irish accredited FS training looks set to be provided in Ireland from this year (2022), a study of how this important development impacts on the Irish FS landscape would be timely.

9.7 Concluding Thoughts

There are schools all across the world making progress on practicing nature pedagogy within their schools and in the process, changing the place we call school towards more open, inclusive and democratic communities. Teachers who practice their craft in this way hold themselves accountable in a different way as the Bay School community demonstrated. The negative impact of accountability structures on pedagogy and on relational understanding remains problematic and has been highlighted as such in the research literature on curriculum redevelopment in Ireland (O’Brien, 2011; Volante, 2018).

Yet it is possible. This is a task that requires us to ‘*care promiscuously*’ (p. 41), in order to advance a ‘*progressive vision of a world that takes the idea of care as its organising principle*’ (The Care Collective, 2020, p.19). This is a collective endeavour

that challenges the *status quo* and emphasises the importance of a shared vision, the role of allies and of practitioners and their settings as agents of change (Piersol, Blenkinsop, Cutter-Mackenzie- Knowles, 2018; Wals, 2020). It is about reaffirming the values of nature in our school systems, enhancing our sense of the interconnected, ecological system of which we humans are but a part. And it is a hopeful task:

The transformative power to heal and move forward in good health is within our shared reach. The power lies within our direct relationship with nature itself. ...this regenerative relationship, combined with informed and responsible action, will achieve a healing time on Earth. In the process, we may heal ourselves. (Charles et al., 2018, p.18).

During the pilot study for this research, I had one of those ‘light-bulb’ moments that happen every now and again and give pause for thought. Participating in a FS session with a group of six-year-olds, our eyes had been drawn towards the tree canopy by the fleeting sight of a grey squirrel bounding up the trunk of a Scots pine. ‘*Lie down, lie down,*’ urged one of the children in a commanding but quiet voice. ‘*That way is best*’. And we did. We lay down. Three six-year-olds and myself, flat out on the damp, slightly muddy floor of a small and not very loved corner of woodland in Dublin city. And there was quiet, as we searched the tree canopy for the elusive squirrel, for perhaps a minute. Later that same day, having made charcoals from the leftover embers of the fire, a child asked to finger paint stripes on my face...and I had no hesitation. The experience remained with me. I realised that in 36 years of teaching, I had never fully encountered this kind of immersive, embodied, child-initiated experience that felt very powerful and right. And I thought myself progressive and innovative as a teacher. What made this possible? Was it being in nature? Was it being suitably attired? Was it the small group? Was it the opportunities for child-led activity? Was it the FS leader? Was it the safety that the session provided to explore and to ‘be’? Was it being retired? Was it all of these?

This study has attempted to provide some answers to these questions. This study shows that making FS pedagogy more widely available in our schools will help to ensure that schools are places where place-responsive, experiential, holistic learning for all is practiced, however imperfectly. Places where skills development and activities are a means to an end, not an end in themselves. Places where time for reflection is prioritised for all. Places where modelling, dialogue, practice and confirmation are the *modus operandi*. Places where progression is measured by fidelity to pedagogy, rather than outcomes and test scores and is aligned with a caring vision. Places where

community involvement is prioritised and where nature is cherished as a valued co-teacher. This was the challenge to care undertaken in Bay School. The response to that challenge described in this study extends Noddings caring relationality to all sentient life.

Perhaps hearing about FS that autumn day in 2012 as I was searching for a solution to fractured relationships in my school touched some kind of chord deep in my psyche that led me to nature-based pedagogy. Growing up in a newly-built suburb of Dublin city in the 1960s, we had hens in our back garden. For us eggs came from the henhouse and vegetables from the garden. That was not unusual back then, it wasn't a lifestyle choice, it was ordinary. How much less likely is it that children today in Ireland or elsewhere, rural or urban, have these kinds of hands-on experiences in nature as part of their growing up?

It seems to me that a very profound opportunity exists for adults to reflect on their pedagogical practice through participation in FS. We cannot promote flourishing in children without being open to making new connections for meaning as adults. FS gives us permission to take a step aside, unlocking a more playful approach to learning which in turn promotes curiosity, exploration and innovative cross-curricular connections. That surely comprises possibilities for deep and creative connection and meaning-making across the curriculum. FS enables us to move from being teachers and pupils to being learners together. The forest provides the tools to enable risks to be taken safely, curiosity to be satisfied and boundaries to be tested. She is a guide, a mentor and a challenger. The transformative nature of this kind of learning is not easily accessible in the indoor classrooms of our schools as presently constructed. When was the last time you placed your hands deep in wet mud?

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Appendices

Appendix A

DCU Confirmation of Ethical Approval (for the Study)



DCUREC2018_238
J.Whelan (Expedited).i

Appendix B

Letter to Chairperson of Board of Management

(to seek permission to conduct the research)

12 February 2019

Dear Chairperson,

My name is Joan Whelan. As you know, I retired as principal of Bay School in 2016. I am in my second year of a full time PhD in DCU, looking at Forest School approaches in the primary school. The draft title of my research is Forest School - A Participative Action Research Study. The research is being supervised by Dr Orla Kelly, Senior Lecturer in Social, Environmental and Scientific Education, School of STEM Education, Innovation and Global Studies in the Institute of Education DCU. I am fully registered with the Teaching Council and have been awarded a Teaching Council research scholarship to part-fund the research. I have Garda Vetting as a DCU student.

I want to find out what it is that the ‘early adopters’ of Forest School (FS) in Ireland think is distinctive about FS for children’s learning and for how teachers approach their teaching. This would feed into a more general understanding of the key principles of FS. The results of this study will contribute to my PhD research thesis and may also be published in conference proceedings and academic papers. Full ethical approval has been granted for this research from DCU. There are three parts to the study.

- A case study of a primary school where FS is in place.
- A survey of all members of the IFSA and all current trainee FS leaders.
- A Reflection Interview

I would like to invite Bay School to participate in the research as the case study school. As the first primary school in Ireland to use FS as a way to deliver aspects of the curriculum, the experience of Bay School is very valuable to research such as mine. Furthermore, schools are being encouraged to participate in research studies like this as part of the development of their professional practice. However, in making a decision, it is important that my position as a retired principal of the school should not in any way influence the choices that the Board of Management make around participation.

The time frame would be April/June 2019 for a pilot study. The main study would take place during the 2019 -20 school year. If permission to take part is granted by the Board, I would then liaise with the principal and the staff to get all the individual permissions in place from staff, children and parents. This study will be conducted as part of the general work of the school day. However, individual permissions will be needed for:

- Staff and children to participate in the recording of the focus group interviews
- Staff and children to be videoed/photographed during FS
- The collection of work samples, journals, observation notes and other recording templates as may be decided at the planning meetings

While all of these things may take place as part of the FS sessions, it is permission for me to participate in the FS sessions and the collection of the data by me that requires consent. Should individual parents not give their permission, or children their assent, then their child will continue to take part in the Forest School sessions, as they normally would; however, they would not participate in any of the data collection measures, for example the focus group interviews, and I would not collect up any of that child's work (such as artwork, photos, journals etc) or assessments or recording templates that may be completed by the class teacher for that child. Likewise, a staff member may decline to participate in the research and so their contribution to planning, and their observations etc during the sessions will not be included in the data collection.

In terms of what the commitment from the school might be, I would participate in the normal school planning session (2/3 hours) with the staff involved before their class starts FS, to go through what it is they wish to achieve during the FS sessions. We would agree ways to measure this and I would design up those agreed ways to measure in consultation with the staff and the children. I will be present at all the FS sessions. Following the sessions, I will participate in a final 'reflection' session with the staff, again 2/3 hours, where we would review the sessions together.

I would also like to do two group interviews with 6 children selected randomly in each participating class.

The following FAQs may help with your decision and include important information:

How will I protect privacy?

The school will be identified in the final research and any related papers that are published; however, individual staff members and children will not. The children and the staff who participate will be assigned a code number or letter or pseudonym. Any identifying information that arises during the case study (such as the name of any person, place, school, etc.) will be anonymised. All information will be treated confidentially. However, confidentiality can only be protected within the limitations of the law - i.e., it is possible for data to be subject to subpoena, freedom of information claim or mandated reporting in some professions.

Can consent be withdrawn?

The school, individual staff members, individual parents and individual children can withdraw from the study at any stage. However, once the focus group transcripts and other data collection measures have been anonymised and analysed, it will not be possible to extract an individual's data.

What will happen to the data?

On completion of the study, all data will be held securely for a period of 5 years post publication of the PhD thesis, after which time all of the data will be destroyed.

What about GDPR (General Data Protection Regulations)?

All data will be collected, stored and processed in compliance with General Data Protection Regulation. The DCU Data Controller details are as follows Mr. Martin Ward (data.protection@dcu.ie Ph: 7005118 / 7008257)

How can I find out more about the research?

You will be free to request details regarding the findings from the research once it is complete. I can be contacted at joanwhelan43@mail.dcu.ie

Are there any risks associated with taking part in this research?

I do not anticipate any risks from participating in this research. In the unlikely event of adverse outcome, you or any of the parents or staff may contact the National Educational Psychological Service (NEPS) for independent advice and support.

Email: neps@education.gov.ie or by phone on 01-8896400.

Who do I contact if I have concerns about this study?

If you have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

If Bay School decides to participate what do I do now?

Complete the external approval/consent form overleaf. I will then contact the school principal to arrange for the individual consents to be distributed. I attach a copy of the proposed information sheets and consent and assent forms for parents, staff and children for your information. Once again, it is important that my position as a retired principal of the school should not in any way influence the choices that participants make around participation.

I want to say thank you in advance for considering my request. By taking part in this research you will contribute to better understanding of FS and what it can offer to children's learning and to teacher practise in the Irish Primary school context. I assure you of my commitment to doing this research to the best of my ability, with integrity, transparency and honesty. Please don't hesitate to contact me by email joan.whelan43@mail.dcu.ie or on 086 3270802 if you require further details or clarification of any of the points in this letter.

I assure you as always of my commitment to doing this research to the best possible standard in co-operation with the school.

Best wishes,

Joan Whelan

Board of Management External Approval/ Consent Form

Research project title: Forest School Pedagogy in the Primary School – A Mixed-Methods Participative Action Research Study

Research investigator: Joan Whelan

- ☐ I have read the information sheet and understand the aims of the study.
- ☐ I understand that the study involves the researcher participating in the FS sessions.
- ☐ I understand that the study involves:
- Staff and child participation in focus group interviews
 - The collection of work samples, journals, observation notes and other recording templates, including audio and video and images as may be decided at the planning meetings during the FS sessions.
- ☐ I understand that the focus group interviews will be audio recorded
- ☐ I am aware that every effort will be made to preserve anonymity and that participants have the right to leave the study at any point.
- ☐ I understand that Bay School will be identified in the final study
- ☐ I am aware that data collected will be stored securely, safely and in accordance with the General data protection regulations
- ☐ I understand that the participation of Bay School is voluntary and that I may withdraw permission at any time on behalf of the school without any effect.
- ☐ I understand that this is a low risk study.
- ☐ If I so wish, I may request that any unprocessed data Bay School has supplied be withdrawn from the research.
- ☐ I give consent to the participation of Bay School in this study

Signed on behalf of the Board of Management

Name: _____

Position in Bay School _____

Signature: _____

Witness: _____

Date: _____

Appendix C

Invitation to principal, staff and parents

(to participate in the research)

Delivered by hand

Staff

12 February 2019

Dear Staff member,

My name is Joan Whelan. As you may know, I retired as principal of Bay School in 2016. I am in my second year of a full time PhD in DCU, looking at Forest School (FS) approaches in the primary school. The provisional title of my research is Forest School Pedagogy in the Primary School – A Mixed-Methods Participative Action Research Study. The research is being supervised by Dr Orla Kelly and Dr Maeve O'Brien in the Institute of Education in DCU. The research is part funded by a Teaching Council research grant.

I want to find out what it is that the 'early adopters' of FS in Ireland think is distinctive about FS for children's learning and for how teachers approach their teaching. This would feed into a more general understanding of the key principles of Forest School. The results of this study will contribute to my PhD research thesis and may also be published in conference proceedings and academic papers. Full ethical approval has been granted for this research from DCU.

There are three aspects to the study:

- A case study of a primary school where FS is in place.
- A survey of all members of the IFSA and all current trainee FS leaders.
- A Reflection Interview

The Board of Management of Bay School have given permission for the school to take part in my research. I am writing to you now to specifically seek your consent to participate. Once again, it is important that my position as a retired principal of the school should not in any way influence the choice that you make around participation.

In terms of what is involved, I would participate in the normal school planning session (2/3 hours) with the staff involved before their class starts FS, to go through what it is they wish to achieve during the FS sessions. We would agree ways to measure this and I would design up those agreed ways to measure in consultation with the staff and the children. I will participate in all the FS sessions. Following the sessions, I will participate in a final 'reflection' session with the staff, again 2/3 hours, where we would review the sessions together.

I would also like to do two group interviews with 6 children, selected randomly, in each participating class.

This study will be conducted as part of the general work of the school day. However, individual permissions will be needed for:

- Staff and children to participate in the recording of the focus group interviews
- Staff and children to be videoed/photographed during FS (without identifiers)
- The collection of work samples, journals, observation notes and other recording templates as may be decided at the planning meetings

While all of these things may take place as part of the FS sessions, it is permission for me to participate in the FS sessions and the collection of your data by me that requires consent. Should individual parents not give their permission, or children their assent, then their child will continue to take part in the Forest School sessions, as they normally would; however, they would not participate in any of the data collection measures, for example the focus group interviews, and I would not collect up any of that child's work (such as artwork, photos, journals etc) or assessments or recording templated that may be completed by the class teacher for that child. Likewise, a staff member may decline to participate in the research and so their contribution to planning, and their observations etc during the sessions will not be included in the data collection.

There are a few important points that you should be aware of before you make a decision:

How will you protect my privacy?

The school will be identified in the final research and any related papers that are published; however, individual staff members and children will not. The children and the staff who participate will be assigned a code number or letter or pseudonym. Any other identifying information that arises during the case study (such as the name of any person, place, school, etc.) will be anonymised. Any images or video will not include faces. All information will be treated confidentially. However, confidentiality can only be protected within the limitations of the law - i.e., it is possible for data to be subject to subpoena, freedom of information claim or mandated reporting in some professions.

Can I withdraw my consent to take part?

You can leave the study at any stage, without giving a reason. However, once the focus group transcripts and other data collection measures have been anonymised and analysed, it will not be possible to extract an individual's data.

What will you do with my data?

On completion of the study, all data will be held securely for a period of 5 years post publication of the PhD thesis, after which time all of the data will be destroyed.

What about GDPR (General Data Protection Regulations)?

Your data will be collected, stored and processed in compliance with General Data Protection Regulation. The DCU Data Controller details are as follows Mr. Martin Ward (data.protection@dcu.ie Ph: 7005118 / 7008257)

How can I find out more about the research?

You will be free to request details regarding the findings from the research once it is complete. I can be contacted at joanwhelan43@mail.dcu.ie

Are there any risks for me associated with taking part in this research?

I do not anticipate any risks from participating in this research. In the unlikely event of adverse outcome, you may contact the National Educational Psychological Service (NEPS) for independent advice and support.

Email: neps@education.gov.ie or by phone on 01-8896400.

Who do I contact if I have concerns about this study?

If you have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

If I decide to participate what do I do now?

Please complete the consent form overleaf.

I want to say thank you in advance for considering my request. By taking part in this research you will contribute to better understanding of Forest School and what it can offer to children's learning and to teacher practise in the Irish Primary school context. I assure you of my commitment to doing this research to the best of my ability, with integrity, transparency and honesty.

Yours sincerely,

Joan Whelan

Staff Consent Form

Research project title: Forest School Pedagogy in the Primary School – A Mixed-Methods Participative Action Research Study

Research investigator: Joan Whelan

- ☐ I have read the information sheet and understand the aims of the study.
- ☐ I understand that the study involves the researcher participating in the FS sessions.
- ☐ I understand that I will be participating in focus group interviews about FS.
- ☐ I understand that the focus group interviews will be audio recorded
- ☐ I understand that I am agreeing to record and share data during the FS school sessions, which may include:
- Reporting templates
 - Unstructured reports
 - Completion of rating scales
 - Child and Staff FS Journals
 - Visual data, such as photos and video and audio recordings of artefacts and the forest school setting, taken by participants
- ☐ I am aware that every effort will be made to preserve my anonymity in participating in this study and that I have the right to leave the study at any point, without giving a reason.
- ☐ I understand the school will be identified in the final study.
- ☐ I am aware that data collected will be stored securely, safely and in accordance with the General data protection regulations
- ☐ I understand that my participation is voluntary and that I may withdraw at any time without any effect.
- ☐ I understand that this is a low risk study.
- ☐ If I so wish, I may request that any unprocessed data I have supplied be withdrawn from the research.
- ☐ I give consent to participate in this study

Participant's name:

Participant's signature:

Date: _____

Letter to parents



21 March 2019

Dear Parents/Guardians,

My name is Joan Whelan. As some of you may know, I retired as principal of Bay School in October 2016. I am currently a full-time PhD student in the Institute of Education in DCU. My research study is about Forest School (FS) and is called 'Forest School Pedagogy in the Primary School – A Mixed-Methods Action Research Study. I am working under the supervision of Dr Orla Kelly, Associate Professor in the School of Science, Technology, Engineering and Mathematics Education (STEM) and Dr Maeve O'Brien, Head of the School of Human Development. The research is part funded by a Teaching Council research grant.

I have already obtained the permission of the Board of Management to conduct part of the research in Bay School during the FS sessions. I would be very grateful if you would read the attached information letter and consider allowing your child to participate in this research study. It is important that my position as a retired principal of the school should not in any way influence the decision you make about your child's participation in the study.

What is the research about? I am trying to find out what it is that the 'early adopters' of FS in Ireland think is distinctive about FS for children's learning and for how teachers approach their teaching. This would feed into a more general understanding of the key principles of Forest School. Full ethical approval has been granted for this research from DCU.

How will the data be used? The results of this study will contribute to my PhD research thesis and may also be published in conference proceedings and academic papers. The data will be used to help us to learn more about FS in Ireland in the primary school context.

What will happen if I agree to allow my child to participate in this research study? If you agree to allow your child to take part in this study, each child will be given an ID number by the class teacher. No names will be used on any of the material collected. No children or adults will be identifiable in any of the images or video collected. You will

be giving your permission for your child to take part in the research. So, they may be asked to take part in group discussion about FS, either in the forest or back in the classroom. before the sessions start and again at the end. This group discussion will be audio taped. However, when the audiotapes are transcribed, no individual child will be identified.

The main part of the research will involve me working with the staff during the FS sessions. I will take an active role in the FS sessions as an assistant FS leader. I will also take part in the planning of the sessions with the staff. During the sessions, I may ask the children about their experience and opinions of FS, take photos and video clips of what FS means to them, invite them to take photos and video clips of what FS means to them, invite them to share their FS journals and materials and ideas with me during the sessions.

The children and the staff will also complete various observation and assessment sheets as part of the normal assessment processes of the school. These will be identifiable to me by code number. Any visual material used in the final study will not be identified by the child's name. No child will be identifiable in any of the video clips collected.

What happens if I do not give my consent for my child to participate? If you do not agree to your child taking part in the research, they will still go to FS as usual, and take a full part in the session. I will not collect any data from them.

Will I be able to give you feedback about your child's learning from the study? No, that is not the purpose of the study. The purpose of this research is to learn more about what the staff and the children think about FS.

My child has special needs – should they take part? Yes, every child in the class is welcome to participate. This research will take place as part of the normal work of the school.

When will the research take place? During the FS sessions that your child participates in this coming school term.

How will I protect the privacy of the children taking part in the study? All information will be treated confidentially. However, confidentiality can only be protected within the limitations of the law - i.e., it is possible for data to be subject to subpoena, freedom of information claim or mandated reporting in some professions. The staff or the children will not be identified in the research thesis or in any subsequent public or written presentation of the study. However, the school will be identified as it was invited to take part in this study because it was the first Irish primary school to introduce FS. All completed work samples will be identified to me only by a code, which will be assigned by the teacher. The code will enable me to match the various pieces of information about an individual child together. All materials will be kept safely in a locked filing cabinet in a secure office in DCU or on a password protected computer.

Can I withdraw my consent for my child to take part? Yes, at any stage.

What will you do with my data? On completion of the study, all data will be held securely for a period of 5 years post publication of the PhD thesis, after which time all of the data will be destroyed.

What about GDPR (General Data Protection Regulations)? Your data will be collected, stored and processed in compliance with General Data Protection Regulation. The DCU Data Controller is Martin Ward (data.protection@dcu.ie Ph: 7005118 / 7008257)

How can I find out more about the research? You will be free to request details regarding the findings from the research once it is complete. I can be contacted at joanwhelan43@mail.dcu.ie

Who do I contact if I have concerns about this study? If you have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

What are the benefits of taking part in this research? You will be contributing to our knowledge about FS in Irish Primary schools. Your child will also learn about taking part in an action research project.

What are the risks of taking part in this research study? There is minimal risk associated with the research study. In the unlikely event of adverse outcome, you may contact the National Educational Psychological Service (NEPS) for independent advice and support. Email: nep@education.gov.ie or by phone on 01-8896400.

What do I do if I am happy for my child to take part? There is a form overleaf for you to sign and return to the school office if you consent to your child taking part in the study.

There is also an assent form that explains the research to your child for your child to sign. I have included this for your information. If you agree to your child taking part in the study, then I will visit your child's class in person, explain the study to the children, answer any questions they may have and ask them to sign the assent form to indicate they are happy or not to take part in the study. If your child declines to assent, then no data will be collected from them.

Thank you for reading this letter. Finally, it's very important that my former position as principal in the school should not influence your decision to allow your child to take part. Please make whatever you feel is the right decision for you and your child.

Yours sincerely,

Joan Whelan

Parent/Guardian Consent Form

Please tick each box and sign the form.

- ☐ I have read the information letter
- ☐ I have had time to consider whether my child will take part in the research.
- ☐ I understand that I am giving permission for my child to participate in the research about FS during the regular FS sessions taking place in my child's class this year.

I understand that giving my consent means my child might be asked to:

- ☐ Take part in groups discussions about Forest School, either in the forest or in the classroom
- ☐ Tell the researcher about their experience and opinions of FS,
- ☐ Take photos and video clips of what FS means to them. Faces will not be identified.
- ☐ Be photographed or videoed or audiotaped during the FS sessions. Faces will not be identified.
- ☐ Share their classwork and materials and ideas with the researcher
- ☐ Complete worksheets and assessment sheets
- ☐ I understand that the research will be published as a PhD thesis and may be published as a research article, reported at conferences and used in presentations.
- ☐ I understand that no individual will be identified in the PhD thesis or in any subsequent public presentation of the research findings.
- ☐ I understand the school will be identified in the final research.
- ☐ I understand that my child's participation is voluntary and that we are free to withdraw from the research at any time without giving any reason.

Name(s) of Parent(s)/Guardian(s) (please print)

Child's name: _____ Child's class: _____

I/We give permission for my/our child to take part in the study.

Signed

_____ (Parent(s) or Guardian(s))

Appendix D

Invitation to IFSA and FS Training Organisations

(to participate in the research)

Date

Dear

My name is Joan Whelan. I am in my second year of a full time PhD in DCU, looking at Forest School (FS) approaches in the primary school. The provisional title of my research is Forest School Pedagogy in the Primary School – A Mixed-Methods Participative Action Research Study. The research is being supervised by Dr Orla Kelly and Dr Maeve O'Brien in the Institute of Education in DCU. The research is part funded by a Teaching Council research grant.

I want to find out what it is that the 'early adopters' of FS in Ireland think is unique about FS for children's learning and for how teachers approach their teaching. This would feed into a more general understanding of the key principles of FS. The results of this study will contribute to my PhD research thesis and may also be published in conference proceedings and academic papers. Full ethical approval has been granted for this research from DCU.

I am currently the Chair of the IFSA. This should not influence your decision to participate one way or the other.

There are two parts to the study.

- A case study of a primary school where FS is in place.
- A survey of all members of the IFSA and all current trainee FS leaders.

I am writing to you to invite you to participate in the research as follows:

First, to invite you to take part in a focus group conversation in order to inform the design of the survey, in the spring of next year. This would take about 2/3 hours, probably in Dublin at a location and time to suit you. I will audio record the focus group interviews and they will then be transcribed with pseudonyms, so that individuals will not be identified.

Second, to ask you to forward an email to your members / trainees, past and present, with information about my study and a link to the survey. I cannot send it directly due to data protection. All survey data collection will be anonymous. A draft email is attached to this letter. See Appendix 2.

There are a few important points that you should be aware of before you make a decision:

When and when and how long?

The time frame would be April/June 2019 for the initial focus group and the pilot study. The focus group will take place at a mutually convenient location and will take approximately 2/3 hours. The actual survey will take about 30 minutes to complete.

The main study will take place during the 2019 -2020 school year.

How will you protect my privacy?

All information will be treated confidentially. The survey will be anonymous.

If you take part in the focus group, you will be assigned a pseudo-name in order to best preserve your anonymity, and any identifying information that arises during the focus group interview (such as the name of any person, place, school, etc.) will be anonymised.

However, confidentiality can only be protected within the limitations of the law - i.e., it is possible for data to be subject to subpoena, freedom of information claim or mandated reporting in some professions.

IFSA and your organisation will be identifiable due to the small number of organisations providing FS training in Ireland.

Can I withdraw my consent to take part?

You can withdraw from the study at any stage. However, once the focus group transcripts have been anonymised and analysed, it will not be possible to extract your data.

What will you do with my data?

On completion of the study, all data will be held securely for a period of 5 years post publication of the PhD thesis, after which time all of the data will be destroyed.

What about GDPR (General Data Protection Regulations)?

Your data will be collected, stored and processed in compliance with General Data Protection Regulation. The DCU Data Controller details are as follows Mr. Martin Ward (data.protection@dcu.ie Ph: 7005118 / 7008257)

How can I find out more about the research?

You will be free to request details regarding the findings from the research once it is complete. I can be contacted at joanwhelan43@mail.dcu.ie

Are there any risks for me associated with taking part in this research?

I do not anticipate any risks from participating in this research. In the unlikely event of adverse outcome, you may contact the following independent person for psychological and counselling support:

Dr William Kinsella, Educational Psychologist. Email: William.kinsella@ucd.ie or by phone on 01-7167974.

Who do I contact if I have concerns about this study?

If you have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

If I decide to participate what do I do now?

If your organisation decides to participate in the survey distribution, please complete the attached External Approval/ Consent Form. If you yourself decide to participate in the focus groups, please complete the attached consent form and return to me.

I want to say thank you in advance for considering my request. By taking part in this research you will contribute to better understanding of FS and what it can offer to children's learning and to teacher practise in the Irish Primary school context. I assure you of my commitment to doing this research to the best of my ability, with integrity, transparency and honesty.

Yours sincerely,

Joan Whelan

External Approval/ Consent Form IFSA

Research project title (draft): Forest School Pedagogy in the Primary School

Research investigator: Joan Whelan

- ☐ I have read the information sheet and understand the aims of the study.
- ☐ I understand that the agreement of IFSA to participate involves circulating an email with an information sheet and an invitation to members, past and present, to participate in an anonymous, online survey. A paper version of the survey will be available at IFSA gatherings during the period Oct 2019 -May 2020.
- ☐ I am aware that every effort will be made to preserve anonymity and that participants have the right to leave the study at any point.
- ☐ I understand that IFSA will be identifiable in the final study
- ☐ I am aware that data collected will be stored securely, safely and in accordance with the General data protection regulations
- ☐ I understand that this is a low-risk study.
- ☐ I give consent to the participation of IFSA in this study

Signed on behalf of IFSA

Name: _____

Role/Position: _____

Signature: _____

_____ Date: _____

IFSA Executive Member Consent Form to participate in Focus Group Interviews

Research project title (DRAFT): Forest School Pedagogy in the Primary School

Research investigator: Joan Whelan

☐ I have read the information sheet and understand the aims of the study.

☐ I understand that I will be participating in focus group interviews about FS.

☐ I understand that the focus group interviews will be audio recorded

☐ I am aware that every effort will be made to preserve my anonymity in participating in this study and that I have the right to leave the study at any point.

☐ I am aware that data collected will be stored securely, safely and in accordance with the General Data Protection Regulations

☐ I understand that my participation is voluntary and that I may withdraw at any time without any effect.

☐ I understand that this is a low-risk study.

☐ If I so wish, I may request that any unprocessed data I have supplied be withdrawn from the research.

☐ I give consent to participate in this study

Participant's name:

Participant's signature:

Date: _____

External Approval/ Consent Form Training Organisations

Research project title (DRAFT): Forest School Pedagogy in the Primary School

Research investigator: Joan Whelan

- ☐ I have read the information sheet and understand the aims of the study.
- ☐ I understand that the agreement of my organisation to participate involves circulating an email with an information sheet and an invitation to trainees, past and present, to participate in an anonymous, online survey.
- ☐ I am aware that every effort will be made to preserve anonymity and that participants have the right to leave the study at any point.
- ☐ I understand that my organisation is likely to be identifiable in the final study
- ☐ I am aware that data collected will be stored securely, safely and in accordance with the General Data Protection Regulations
- ☐ I understand that this is a low-risk study.
- ☐ I give consent to the participation of (name of organisation) in this study

Signed on behalf of (name of organisation)

Name:

Role/Position: _____

Signature:

_____ Date:

Sample email for passing on to colleagues/friends -ideally with a cover sentence from you to introduce it:

Dear friends,

My name is Joan Whelan. I am Chairperson of the Irish Forest School Association at present and a retired primary school principal. I am completing a PhD in DCU about the distinctiveness of Forest School in the Irish context and really want to include the views of adults aware of the Forest School movement in Ireland. I would be so appreciative if you would complete a short survey for me at this link (insert link to survey):

The survey will take about 15 minutes. I really appreciate your help - this is a chance to have your voice included in an important piece of work about the development of Forest School in Ireland.

Don't hesitate to get in touch if you have any questions,

Best wishes, and thanks in anticipation,

Appendix E

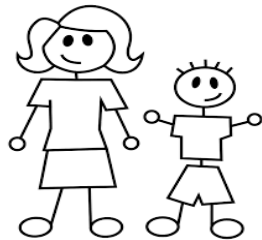
Children's Assent Form.

Dear



My name is Joan.

I am trying to find out more about Forest School



I will be going to Forest School with your class.



I want to talk to you about Forest School.

I may ask you to take some photos and show me your writing and drawing about Forest School.



I may also watch you and your friends during Forest School and take some pics of you, but I will not use your face.



If you don't want to chat or show me your work, that's fine – just say no!

When Forest School is over, I may ask you to chat with me again about it.

You will not need to write your name on anything.



If you don't agree, you can still go to Forest School as usual with your class.

Thank you,

Joan



Child Assent Form

(Circle one smiley face)

I agree to take part in the research about Forest School.



I do not agree to take part in the research about Forest School.



My name is _____

Appendix F

Participant Validation Summary

(Refers to chapter five and six)

The FSL, Laura, opened her remarks by noting that reading the chapters took her *‘right back there to the rosy cheeks, the leaf fighting, the javelin throwing, I remember it like it was last week’*. She highlighted the importance of collaboration and sharing between the FSL and the school staff as playing *‘a vital role in a successful FS programme’* and in the *‘teachers understanding of FS practice’*. For her, reading about the parents' understanding of their children's experiences in FS was *‘exciting, as I would not get much feedback from them’* [the parents]. She commented specifically on her experience of the children's diary writing. She felt that from her experience of FS in general, for some children diary writing was really important: *I noticed [in the chapters] ...that they found it tedious, they found it boring and just wanted their freeplay, My observation on one or two of the children was that they took their time to get what they wanted to write, down, even if it ate into their freeplay. They didn't seem anxious to get up and play, they seemed happy to write’*. Finally, she commented on the relationship between the teachers and the FSL: *‘You got the teacher and FSL relationship spot on regarding asking teachers to observe and try to relax and enjoy their time in this unique situation and for me to tell teachers to do this can be a bit awkward for me as well as for them.’*

Clare, the principal, described the accounts in both chapters as *‘very balanced and fair’*. She said that what struck her most in Chapter Five was the *‘contrast between the two teachers in their leading of one of the activities in the absence of the FSL. From my point of view, I think it gives definite food for thought considering the difference between the teacher who is FS trained and the teacher who wasn't’*. She also remarked about finding ways to effectively build the capacity of the teacher in the role of observer. For her, Chapter six illustrated the *‘impact of differing personalities of the teachers... Their own confidence, strengths and areas which require development can have a real effect on the experience of FS for both staff and children*. She noted that for a *‘teacher who is quite regimented it can be very difficult for them when they are encouraged to just "go with the flow" as was mentioned’*. She went on:

'The importance of relationships between staff is vital and I think illustrated well through the research findings. It is important for a relationship to be established where the ability for a conversation can happen for the FSL to ask a teacher to step back if necessary. This is linked to my point earlier about building on teachers' capacity more as active observer'. Clare wondered about the reasons behind the demise of the story or poem led by the teacher after the first week: 'I thought it was very interesting to note that after the first week there was no more poems or story led by the teachers. Was this impacted by the teachers' ability to be fluid or the pressure of being observed by many? Clare also commented on how the FSL, Laura, described her own role in the sessions: 'I think what is really interesting is that I get the sense that the FSL doesn't have a full awareness of how integral she is to the whole programme - and that you need the "right" person in that role to maximise the full potential of FS for all involved.

Appendix G

Staff Planning Focus Group Schedule

Setting the scene

The researcher will remind the participants that they are very experienced and very successful at delivering the curriculum through this approach and the research is trying to capture their insights as a way to find out more about how FS works from a school that has been successful in introducing it and in sustaining it so that is now simply part of what the school offers. The researcher will emphasise that she is interested in the distinctiveness of FS not just for children's learning, but also for how staff approach their role.

Participants are reminded that the session will be audio recorded. Participants are reminded about the role of the researcher in the process. Opportunity for questions about the research.

Activity 1

Participants will be given large sheets and will be encouraged to write/sketch/doodle words and images they associate with FS from previous experience. Asked to write their role (ie class teacher/resource teacher) on the sheet – no names. A semi-structured conversation will follow, using the following stimulus questions:

- What is your experience of FS?
- How does it differ from the classroom/school setting (if it does)?
- What is it about FS that enables this to happen?
- Are there difficulties?

Activity 2 Ask the teachers to tell us about the children

Activity 3 Distribute post its and place sheets on the wall with the questions below. Following a discussion, ask participants to write their responses on post-its and place on the sheet.

- What you would like to achieve from FS for this group/individuals/ yourself.
- What is it about FS that makes you think these kinds of things can be achieved?
- How will we know we have been successful? What will we see?
- How will we record that?
- What links back to the classroom can we make?

Appendix H

Staff Look-back Focus Group Schedule

Artefacts and reflections from the sessions available for staff to view for 10/15 minutes for Robins focus group. (This was not possible for the Owls due to Covid-19 school closures.

Each participant was asked to think about two high points and two low points from the FS sessions and write on a post-it. They place their post-its on a large sheet of paper, and position them according to a time line of the sessions.

High

Low

Week1.....Week 8

An open- ended discussion followed. Stimulus questions:

- Did it turn out the as intended?
- What different has it made to the class as a group? To individual children?
To my teaching practice?
- What evidence is there of change?
- Were there any surprises?
- What would we do differently?
- If the school we decided to stop FS what difference would that make?
- How would it affect the children's learning and how you approach your teaching?

Participants will then complete a short survey normally used in the school.

For the Owls Staff, a brief chat about whether the current situation (Covid-19 School closures) has made people think any differently about Learning Outdoors or about Forest School in particular was also included.

Appendix I

Staff Review Meeting Schedule.

Date: **FS session:** **No of pupils:** **Adults:**

Context (weather/risk assessment/staffing etc) Children Adults
Routines/ Activities Children Adults
How successful was the session? Children 1.....2.....3.....4.....5 Adults 1.....2.....3.....4.....5
Golden moments
Notes for next session Children Adults

Appendix J

Staff Individual Session Review Sheet

Role:

Week (DATE)

Please indicate any 'Golden Moments' today

How was FS for me today?

How can I use the session today back in my work in the classroom/school/yard?

Any other comments about today?

Appendix K

FS Staff Review and Reflection (End of Sessions).

Have you any comments/ideas/suggestions etc. for the future regarding:

- Staffing

- Plan for the day

- Learning outcomes/intentions

- Timetable

- Where FS fits with curriculum planning? Assessment?

- Integration of FS in the classroom

- Observation Forms

- Any other comments?

For the review with the Owls staff, one additional question was included:

There has been a lot of discussion about Outdoor Learning in the current context. Also, the NCCA is looking at curriculum revision, which mentions the importance of understanding both the natural world and the social world as one of the key ‘competencies’. Have you any thoughts on this?

Appendix L

Robins Children Pre-FS Focus Group Schedule

Venue: Familiar room in the school during the normal school day.

Time: 45 minutes

Eight children were selected randomly to participate. Groups will be controlled for gender. The focus group session will be audio recorded. All identifying information will be removed from the transcripts. As stimulus for the discussion, images, artefacts and drawings of FS will be hung up in the room.

Introductions and a test of the technology

I will introduce myself as well and remind them of what I am doing, that we will be taping the chat and that they can go back to class at any stage if they wish.

Stimulus questions:

What do they think FS will be about?

What they think they will learn?

What they think the adults will learn?

What they think it is about FS that will make those things happen.

Do you think FS is different to the classroom?

How we will know that?

How will we be able to know that we have learnt what we thought we would?

Children will be able to express their views verbally, describe their views, or to draw a picture or write about them.

Appendix M

Children's Look-back Focus Group Schedule

Venue: Familiar room in the school during the normal school day. As stimulus for the discuss, images, artefacts and drawings of FS will be hung up in the room.

Time: 45 minutes

Participants: 8 children were selected randomly to participate.

Introductions and a test of the technology

I will introduce myself as well and remind them of what I am doing, that we will be taping the chat and that they can go back to class at any stage if they wish.

Activity:

Reminder of our discussion before FS began

I will ask them to write words and images they associate with FS on large A3 sheets.

I will ask them to explain their choices.

I will ask them to talk about the high points and the low points of FS. They can draw on sheets their responses while we chat.

Discussion:

What kind of things do you need for FS to happen?

If Bay School stopped FS for next year, what would people say? What would the school miss out on?

Children will be able to express their views verbally, describe their views, or to draw a picture or write about them.

Appendix N

Owls Children Look-back Activity Pack

Dear Owls Class,

I hope you are all well. It's Joan here, from Forest School. I really enjoyed being with you in the forest and thanks for all your help with my research. Sorry we did not get to have more sessions together. I was hoping that this week, that you could do some activities that I can use in my research? There are four activities:

Activity 1 - Survey (sheet below)

Write and draw the things you enjoyed most towards the top of the page (near the smiley face) and the things you liked least towards the bottom of the page (the sad face) and the things that were ok in the middle.

Activity 2 Writing

1. What kind of things does a school need for Forest School to happen?
2. Have you any suggestions for Forest School for next year?
3. Write a short story to explain to someone who has never heard about Forest School what it is like and what happens there and what you learn there?

Activity 3 Art

Draw or paint or make a picture of you in Forest School. Write a sentence at the bottom of the picture to explain your art.

Activity 4

If you have any more comments that you want to make about Forest School, please write or draw then on a sheet. You can ask your parents or brothers and sisters for their opinion too!

Thanks very much for all your help. Joan

Activity 1



Appendix O

Parent's FS Sheet (Pre and Post)

Pre

To help us to design the Forest School sessions, please mark on the scale (*with 1 being the least and 5 being the most*) where you think your child is right now:

Self-esteem/Self-confidence 1.....2.....3.....4.....5

Social Skills 1.....2.....3.....4.....5

Motivation/Concentration 1.....2.....3.....4.....5

Language /Communication 1.....2.....3.....4.....5

Physical/Motor Skills 1.....2.....3.....4.....5

Skills and Knowledge (literacy and numeracy)

1.....2.....3.....4.....5

Skills and Knowledge (about the environment)

1.....2.....3.....4.....5

What is your initial reaction to the project?

1.....2.....3.....4.....5

How do you think your child will respond?

1.....2.....3.....4.....5

Any other general comments/ concerns?

Child's name (*First name only*) _____

Form filled in by: Mum / Dad / Guardian (*Please circle*)

FS Parent Sheet (post)

To help us to see how successful the FS sessions were, please rate on a scale of 1-5 (*with 1 being the least and 5 being the most*) where you think your child is on each of these scales right now.

Self-esteem/Self-confidence 1.....2.....3.....4.....5

Social Skills 1.....2.....3.....4.....5

Motivation/Concentration 1.....2.....3.....4.....5

Language /Communication 1.....2.....3.....4.....5

Physical/Motor Skills 1.....2.....3.....4.....5

Skills and Knowledge (literacy and numeracy)

1.....2.....3.....4.....5

Skills and Knowledge (about the environment)

1.....2.....3.....4.....5

What is your overall reaction to Forest School?

1.....2.....3.....4.....5

How do you think your child responded to Forest School?

1.....2.....3.....4.....5

Any other general comments/ concerns/ suggestions are most welcome here/overleaf. Thank you.

Child's name (*First name only*) _____

Form filled in by: Mum / Dad / Guardian (*Please circle*)

Appendix P

The Design of the National Survey

Sat 27 Apr 2019 12 midday – 2.30pm.

Introductions: The researcher acted as facilitator of the session. The purpose of this meeting was to inform the design of a survey for circulation to the Irish Forest School community as part of my PhD research.

Setting the scene: The researcher introduces session by reminding the participants that they became involved in FS because they felt they could achieve certain outcomes by using the FS approach. By doing that the feeling was that certain things could be achieved that may not be possible in the regular class room or other indoor setting. The researcher will remind the participants that they are very experienced and knowledgeable about FS and the research is trying to capture their insights as a way to find out more about how FS works in Ireland. The researcher will emphasise that she is interested in FS not just for children's learning, but also for adults.

Participants are reminded that the session will be audio recorded and notes will also be taken. Participants are reminded about the role of the researcher in the process.

Participants were told that this is the pilot phase, so none of the data collected will be used in the final study - it's really a test to see where we might make changes, things that work, things that need to be included that weren't things that were complicated.

Stimulus activity

Participants will be given large sheets and will be encouraged to write/sketch/doodle what FS is, images associated with FS/ learning associated with FS etc/ sheets to doodle/write words/sketches to accompany the chat.

Stimulus questions

- What do you think is achieved in FS? For the children? for the adults?
- How does it differ from the indoor/classroom/school setting (if it does)?
- What is it about FS that enables this to happen?
- Are there difficulties in establishing /sustaining FS?

The facilitator circulates some draft surveys for discussion. She reminds the participants that she will ask them to complete a draft survey following the focus group. Thanks etc.

Draft Survey Items for Focus Group Discussion to Design the Final Survey

Dear

My name is Joan Whelan. The Irish Forest School Association /Down to Earth/Circle of Life have agreed to circulate this email on my behalf. I am currently completing a PhD in DCU, looking at Forest School approaches in the primary school. The research is being supervised by Dr Orla Kelly and Dr Maeve O'Brien in the Institute of Education in DCU.

I am trying to find out what it is that the 'early adopters' of FS in Ireland think is distinctive about FS for children's learning and for how teachers approach their teaching in the primary school context. This will feed into a more general understanding of the key principles of Forest School. The results of this study will contribute to my PhD research thesis and may also be published in conference proceedings and academic papers. Full ethical approval has been granted for this research from DCU.

I am writing to you to invite you to participate in the research by completing an anonymous survey about FS at this **link**. The survey will take approximately 30 minutes.

There are a few important points that you should be aware of before you make a decision:

How will you protect my privacy?

All information will be treated confidentially. The survey will be anonymous. However, confidentiality can only be protected within the limitations of the law - i.e., it is possible for data to be subject to subpoena, freedom of information claim or mandated reporting in some professions.

Can I withdraw my consent to take part?

You can leave the survey at any stage. However, once you have submitted your response it will not be possible to extract your data.

What will you do with my data?

On completion of the study, all data will be held securely for a period of 5 years post publication of the PhD thesis, after which time all of the data will be destroyed.

What about GDPR (General Data Protection Regulations)?

Your data will be collected, stored and processed in compliance with General Data Protection Regulation. The DCU Data Controller details are as follows Mr. Martin Ward (data.protection@dcu.ie Ph: 7005118 / 7008257)

How can I find out more about the research?

You will be free to request details regarding the findings from the research once it is complete. I can be contacted at joanwhelan43@mail.dcu.ie

Are there any risks for me associated with taking part in this research?

I do not anticipate any risks from participating in this research.

Who do I contact if I have concerns about this study?

If you have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research

and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

If I decide to participate, what do I do now?

(Online version) Just click on this **link** to complete the survey.

(Paper version) Just tick this box to indicate you are happy to complete the survey and turn over the page to begin.

Thank you in advance for considering my request. By taking part in this research you will contribute to better understanding of Forest School in the Irish Primary school context. I assure you of my commitment to doing this research to the best of my ability, with integrity, transparency and honesty.

Yours sincerely,

Joan Whelan

This part of the survey is about environmental attitudes and connection to nature. Please answer each of these questions in terms of the way you generally feel. There are no right or wrong answers. simply state as honestly as you can your views right now.

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

CNS1 I often feel a sense of oneness with the natural world around me

1	2	3	4	5

CNS 2 I think of the natural world as a community to which I belong

1	2	3	4	5

CNS 3 I recognize and appreciate the intelligence of other living organisms

1	2	3	4	5

***CNS 4** I often feel disconnected from nature

1	2	3	4	5

CNS 5 When I think of my life, I imagine myself to be part of a larger cyclical process of living.

1	2	3	4	5

CNS 6 I often feel a kinship with animals and plants.

1	2	3	4	5

CNS 7 I feel as though I belong to the Earth as equally as it belongs to me

1	2	3	4	5

CNS 8 I have a deep understanding of how my actions affect the natural world

1	2	3	4	5

CNS 9 I often feel part of the web of life

1	2	3	4	5

CNS 10 I feel that all inhabitants of Earth, human, and nonhuman, share a common ‘life force’.

1	2	3	4	5

CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world

1	2	3	4	5

***CNS 12** When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature

1	2	3	4	5

CNS 13 I often feel like I am only a small part of the natural world around me, and that I am no more important than the grass on the ground or the birds in the trees

1	2	3	4	5

***CNS 14** My personal welfare is independent of the welfare of the natural world.

1	2	3	4	5

NEP1 We are approaching the limit of the number of people the earth can support

1	2	3	4	5

NEP2 Humans have the right to modify the natural environment to suit their needs

1	2	3	4	5

NEP3 When humans interfere with nature it often produces disastrous consequences

1	2	3	4	5

***NEP4** Human ingenuity will insure that we do not make the earth unlivable

1	2	3	4	5

NEP5 Humans are severely abusing the environment

1	2	3	4	5

***NEP6** The earth has plenty of natural resources if we just learn how to develop them

1	2	3	4	5

NEP7 Plants and animals have as much right as humans to exist

1	2	3	4	5

***NEP8** The balance of nature is strong enough to cope with the impacts of modern industrial nations

1	2	3	4	5

NEP9 Despite our special abilities' humans are still subject to the laws of nature

1	2	3	4	5

***NEP10** The so-called "ecological crisis" facing humankind has been greatly exaggerated

1	2	3	4	5

NEP11 The earth is like a spaceship with very limited room and resources

1	2	3	4	5

***NEP12** Humans were meant to rule over the rest of nature

1	2	3	4	5

NEP13 The balance of nature is very delicate and easily upset

1	2	3	4	5

***NEP14** Humans will eventually learn enough about how nature works to be able to control it

1	2	3	4	5

NEP15 If things continue on their present course, we will soon experience a major catastrophe

1	2	3	4	5

NR61 My ideal holiday spot would be a remote, wilderness area.

1	2	3	4	5

NR62 I always think about how my actions affect the environment.

1	2	3	4	5

NR63 My connection to nature and the environment is a part of my spirituality.

1	2	3	4	5

NR64 I take notice of wildlife wherever I am.

1	2	3	4	5

NR65 My relationship to nature is an important part of who I am.

1	2	3	4	5

NR66 I feel very connected to all living things and the earth.

1	2	3	4	5

C1 I spend a lot of time in natural settings (woods, mountains, desert, lakes, ocean)

1	2	3	4	5

C2 Engaging in environmental behaviours is important to me

1	2	3	4	5

C3. I think of myself as a part of nature, not separate from it

1	2	3	4	5

C4 If I had enough money I would certainly devote some of it to working for environmental causes

1	2	3	4	5

C5 When I am upset or stressed, I can feel better by spending some time outdoors “communing with nature”

1	2	3	4	5

C6 Living near wildlife is important to me; I would not want to live in a city all the time

1	2	3	4	5

C7 I have a lot in common with environmentalists as a group

1	2	3	4	5

C8 I believe that some of today’s social problems could be cured by returning to a more rural life-style in which people live in harmony with the land

1	2	3	4	5

C9 I feel that I have a lot in common with other species

1	2	3	4	5

C10 *I like to garden.*

1	2	3	4	5

C11 Being a part of the ecosystem is an important part of who I am.

1	2	3	4	5

C12 I feel that I have roots to a particular geographic location that had a significant impact on my development.

1	2	3	4	5

C13 Behaving responsibly toward the Earth—living a sustainable lifestyle—is part of my moral code.

1	2	3	4	5

C14 Learning about the natural world should be an important part of every child's upbringing.

1	2	3	4	5

C15 In general, being part of the natural world is an important part of my self-image.

1	2	3	4	5

C16 I would rather live in a small room or house with a nice view than a bigger room or house with a view of other buildings

1	2	3	4	5

C17 I really enjoy camping and hiking outdoors.

1	2	3	4	5

C18 Sometimes I feel like parts of nature—certain trees, or storms, or mountains—have a personality of their own.

1	2	3	4	5

C19 I would feel that an important part of my life was missing if I was not able to get out and enjoy nature from time to time.

1	2	3	4	5

C20. I take pride in the fact that I could survive outdoors on my own for a few days.

1	2	3	4	5

C21 I have never seen a work of art that is as beautiful as a work of nature, like a sunset or a mountain range.

1	2	3	4	5

C22 My own interests usually seem to coincide with the position advocated by environmentalists.

1	2	3	4	5

C23 I feel that I receive spiritual sustenance from experiences with nature

1	2	3	4	5

C24 I keep mementos from the outdoors in my room, such as shells or rocks or feathers

1	2	3	4	5

In the last six months, how often, if at all, have you engaged in the following environmental activities and actions?

1 Never 2 Rarely 3 Sometimes 4 Often 5 Always/All the Time

A1 Educated myself about environmental issues (e.g., through social media, TV, talks etc)

1	2	3	4	5

A2 Participated in an educational event (e.g., workshop) related to the environment

1	2	3	4	5

A3 Organized an educational event (e.g., workshop) related to environmental issues

1	2	3	4	5

A4 Talked with others about environmental issues (e.g., partner, parent(s), children, or friends)

1	2	3	4	5

A5 Used online tools (e.g., social media, YouTube, Twitter Blogs etc) to raise awareness about environmental issues

1	2	3	4	5

A6 Used traditional methods (e.g., letters to the editor, articles) to raise awareness about environmental issues

1	2	3	4	5

A7 Personally wrote to or called a politician/government official about an environmental issue.

1	2	3	4	5

A8 Became involved with an environmental group or political party

1	2	3	4	5

A9 Financially supported an environmental cause

1	2	3	4	5

A10 Took part in a protest/rally about an environmental issue

1	2	3	4	5

A11 Organized an environmental protest/rally

1	2	3	4	5

A12 Organized a boycott against a company engaging in environmentally harmful practices

1	2	3	4	5

A13 Organized a petition (including online petitions) for an environmental cause

1	2	3	4	5

A14 Consciously made time to be able to work on environmental issues

1	2	3	4	5

A15 Participated in a community event which focused on environmental awareness

1	2	3	4	5

A16 Organized a community event which focused on environmental awareness

1	2	3	4	5

A17 Participated in nature conservation efforts (e.g., planting trees, restoration of waterways)

1	2	3	4	5

A18 Spent time working with a group/organization that deals with the connection of the environment to other societal issues such as justice or poverty

1	2	3	4	5

This part of the survey is to do with beliefs about teaching and learning.

For each of the following, please rate the extent to which you agree with each statement, using the scale from 1 to 5 as shown below. Please respond as you really feel, rather than how you think “most people” feel.

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

S1 It is important that an adult can see every child at all times

1	2	3	4	5

S2 I don't mind children getting muddy and wet

1	2	3	4	5

S3 It is more difficult for staff to manage behaviour out of doors than indoors

1	2	3	4	5

S4 Children should be allowed to climb trees if they feel safe doing so

1	2	3	4	5

S5 I would be concerned if a child was out of sight of an adult

1	2	3	4	5

S6 I would be concerned if a child was using knives ***at school/as part of a learning activity***

1	2	3	4	5

S7 *If my child had an accident, I might sue the school*

1	2	3	4	5

S8 Children who are allowed to take risks at a young age will take risks as teenagers, which might get them into trouble with the police

1	2	3	4	5

S9 When they are walking, children should hold hands

1	2	3	4	5

S10 Glass and other unexpected items aren't a problem if children are taught how to deal with them

1	2	3	4	5

S11 If children use tools it is important they are not sharp

1	2	3	4	5

S12 Children should stay on task to meet the desired learning outcomes

1	2	3	4	5

S13 Children can be taught to use knives from an early age

1	2	3	4	5

S14 I don't mind my children taking risks as long as I know a full risk assessment has been written

1	2	3	4	5

S15 Children learn best when indoors in a controlled environment

1	2	3	4	5

PF1 The curriculum should contain an orderly arrangement of subjects that represent the best of our cultural heritage

1	2	3	4	5

PF2 Children learning from other children is an important component of any learning environment

1	2	3	4	5

PF3 Schools should be sources of new social ideas

1	2	3	4	5

PF4 Demonstration and recitation are essential components of learning

1	2	3	4	5

PF5 Schools exist to facilitate self-awareness

1	2	3	4	5

PF6 There are essential skills all children must learn in school

1	2	3	4	5

PF7 Teaching should centre around the inquiry approach

1	2	3	4	5

PF8 Children should be allowed more freedom than they usually get in their learning activities at school.

1	2	3	4	5

PF9 Children need and should have more supervision and discipline than they usually get.

1	2	3	4	5

PF10 Teachers should be facilitators of learning

1	2	3	4	5

PF11 Factual knowledge is an important component of any learning

1	2	3	4	5

PF12 Intensive instruction of skills and knowledge through repeated exercise is a good way of learning

1	2	3	4	5

PF13 Ideal teachers are constant questioners

1	2	3	4	5

PF14 Children should play an active part in curriculum design and evaluation

1	2	3	4	5

PF15 There are essential pieces of knowledge that all children should know

1	2	3	4	5

PF16 Right from the first year in school teachers must teach the children at his/her level and not at the level of the years she/he is in.

1	2	3	4	5

PF17 The curriculum should focus on social problems and issues

1	2	3	4	5

PF18 The child should be a receiver of knowledge

1	2	3	4	5

PF19 The teacher should be a strong authority figure in the classroom

1	2	3	4	5

PF20 Children are usually not capable of solving their problems through logical reasoning

1	2	3	4	5

PF21 Too much of children's time in school is spent on guidance and activities and too little on academic preparation

1	2	3	4	5

PF22 It is more important for children to learn to obey rules than that they make their own decisions

1	2	3	4	5

PF23 School councils are a good 'safety valve' but should not have too much influence on school policy

1	2	3	4	5

PF24 Children can be trusted to work together without supervision

1	2	3	4	5

PF25 If a child uses 'bad' language in school it must be considered a moral offence

1	2	3	4	5

PF26 If children are allowed to use the toilets without getting permission in schools this privilege will be abused

1	2	3	4	5

PF27A A few children in schools are just trouble makers and should be treated accordingly

1	2	3	4	5

PF28 It is often necessary to remind children that their status in school differs from that of teachers

1	2	3	4	5

PF29 Children cannot perceive the difference between democracy and anarchy in the classroom

1	2	3	4	5

PF30 Children often misbehave in order to make the teacher look bad.

1	2	3	4	5

KKW17 I am able to work well by myself

1	2	3	4	5

KKW18 I prefer to make my own decisions about how to do something

1	2	3	4	5

KKW19 I take part confidently in group work/collaborative approaches

1	2	3	4	5

KKW20 It's important to listen well to others to get things done

1	2	3	4	5

KKW21 It is important to help other people in life

1	2	3	4	5

KKW22 I accept help when I need it

1	2	3	4	5

KKW23 I am generally confident in new places

1	2	3	4	5

KKW24 I am generally confident in working with new people

1	2	3	4	5

Please answer the following five questions as fully as you can.

1. How would you describe Forest School to someone who have not previously heard about it?
2. How did you become interested in Forest School?
3. What kind of things do you think enable Forest School to work well in a primary school?
4. How would you describe FS to someone who had never heard of it?
5. What must a FS have to be successful?

To finish there are a few biographical details that I would like you to complete. This should take just one minute!

Please indicate your age group 18-30/ 30-45/45-60/ 60+

Please indicate your gender M/F/

Please say which of these categories best fits your main occupation:

Educator (pre-school/primary school, post primary/third level)

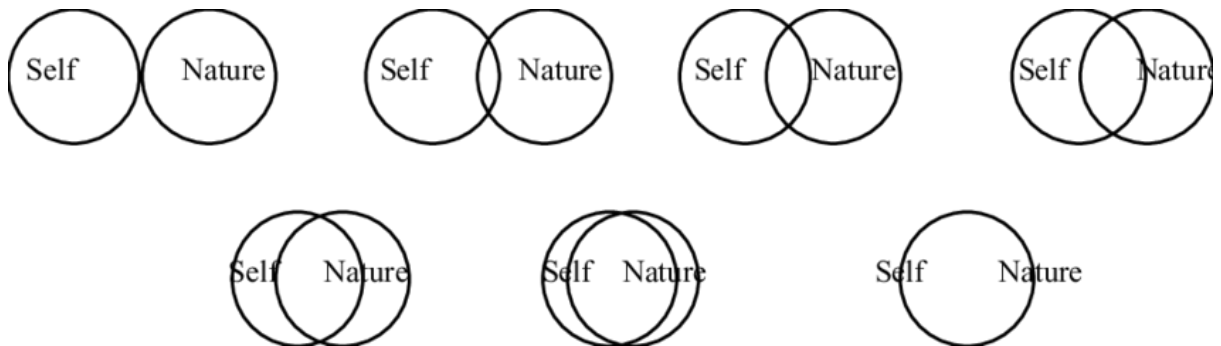
Educator (community based, including home educators)

Environmentalism/Woodland owner

Other

Are you a qualified FS leader? Yes/ No/ In training

Please circle the picture which best describes your relationship with the natural environment



Is there any metaphor below that corresponds with your view of what ‘teaching’ should be about? If not, can you give me your own metaphor about teaching or add anything to the statements below?

Metaphor 1

Teaching is like growing plants. I am the gardener who looks after my plants. I give them adequate food and water in order to develop well. The plants are dependent on me and only I as a gardener can create the best conditions for my plants. If I do not look at giving them the right care they cannot evolve.

Metaphor 2

Teaching is like a guide book. The guide gives you hints and tips for discovering new places, sights and insights that can be useful for those who have never visited the place. You choose the direction and the guide provides support and assistance. If you have already visited the place the guide can give you a new way to explore the place or to understand the culture.

Metaphor 3

To teach is like ants’ work in an anthill. Each ant’s contribution is valuable and stimulating for the survival of the stack, but cooperation between them is important. In order to achieve a good outcome the ants cooperate, a result that is beneficial to all in the anthill.

Learning

Is there any metaphor that corresponds with your view of learning? If not, can you give me your metaphor or add anything?

Metaphor 4

Learning is like a sponge in which the learner absorbs as much water as possible. The learning is controlled by water availability. Anyone who distributes water also controls the learning process. Greater access to water means more learning and vice versa.

Metaphor 5

Learning is like building a brick house. The student is bricklayer who adds stone on top of stone so the house gets bigger and bigger. The student is also the owner of the house. As the teacher I am the site foreman who gives good advice and provides help so the house can be steadily and firmly anchored.

Metaphor 6

Learning is a journey where the group discusses its path to the goal. The trip is not mapped and the target is not completely known. Perhaps the trip will go in a different direction depending on what we encounter on the route. Within the group the way is traced out and everything new that is discovered after the trip is communicated within the group

**Thank you for completing this survey. As you know this is a pilot phase of the study.
Any comments on the survey design would be most welcome!**

Please add any further comments here:

Further details of the Likert items included in the draft survey items, including their psychometric properties.

The Connectedness to Nature Scale (CNS) (Mayer & Mc Pherson Franz, 2004). This is a single factor trait measure designed to tap into an individual's affective, experiential connection to nature. It comprises 14 items. Mayer & Mc Pherson Franz (2004) conducted a series of five studies which led them to confirm '*strong evidence*' of its reliability and validity and a '*moderately strong positive relationship*' between scores on the CNS and eco-friendly actions (p. 512).

The New Environmental Paradigm Scale (NEP) (Dunlap, Van Liere, Mertig, & Emmet Jones, 2000) is a measure of environmental concern. It comprises 15 statements about the relationship between humans and the environment. Agreement with the eight odd-numbered items and disagreement with the seven even-numbered items indicate pro-environmental world view. It has good levels of internal consistency and can be used as a single or multi-dimensional scale (Dunlap, 2008).

The Nature Relatedness Scale (NR6) (Nisbet & Zelenski, 2013) is a 6-item measure of nature connectedness. Strong nature relatedness is associated with greater happiness and ecological wellbeing. It has good levels of internal consistency (Nisbet & Zelenski, 2013).

The Environmental Identity Scale (EIS) (Clayton, 2003) is a 24 item 3-point Likert scale exploring environmental identity. Environmental identity is about our sense of connection to the natural environment which affects the ways in which we perceive and act towards the world. It met acceptable standards of reliability and validity (Clayton, 2003)

The Environmental Action Scale (Alisat & Reimer, 2015) is an 18-item environmental action scale comprising two scales, participatory action and leadership action. Engagement in civic action is associated with having a collective change-oriented effect on environmental issues. Internal consistency was above .9 and the scale had strong psychometric properties ((Alisat & Reimer, 2015).

The Educational Beliefs Questionnaire (Silvernail, 1992) (18 items), a measure of the respondents' beliefs about pedagogy along three dimensions, traditionalist, progressivist and romanticist. The internal consistency coefficients for the three dimensions were all above .7, ranging from .73 to .76 (Silvernail, 1992).

The Pupil Control Ideology Form (Willower, Eidell, & Hoy, 1967) (30 items), a unidimensional measure of the respondent's pupil control ideology on a continuum from humanistic to custodial. Internal consistency levels of above .9 were reported (Willower et al., 1967).

The Inclusion of Nature in Self Scale (Schultz, 2001), a single item to measure the extent to which the respondent includes nature as part of their identity were also included. It has good levels of internal consistency (Martin & Czeller, 2016).

Appendix Q

The Pilot Survey

Dear

My name is Joan Whelan. Thank you for agreeing to complete this survey about Forest School. The survey will take approximately 20 minutes.

I am trying to find out what it is that is distinctive about Forest School for learning and for teaching. The results of this study will contribute to my PhD research and may also be published in conference proceedings and academic papers. Full ethical approval has been granted for this research from DCU.

By taking part in this research, you will contribute to better understanding of Forest School in the Irish Primary school context. I assure you of my commitment to doing this research to the best of my ability, with integrity, transparency and honesty.

Yours sincerely,

Joan Whelan

Please read the points below

How will I protect your privacy?

All information will be treated confidentially. The survey will be anonymous. However, confidentiality can only be protected within the limitations of the law.

Can you withdraw consent to take part?

You can leave the survey at any stage. However, once you have submitted your response it will not be possible to extract your data as the survey is anonymous.

What will I do with your data?

On completion of the study, all data will be held securely for a period of 5 years post publication of the PhD thesis, after which time all of the data will be destroyed.

What about General Data Protection Regulations (GDPR) ?

Your data will be collected, stored and processed in compliance with General Data Protection Regulation. The DCU Data Controller details are as follows: Mr. Martin Ward (data.protection@dcu.ie Ph: 7005118 / 7008257)

How can you find out more about the research?

You will be free to request details regarding the findings from the research once it is complete. I can be contacted at joanwhelan43@mail.dcu.ie

Who do you contact if you have concerns about this study?

If you have concerns about this study and wish to contact an independent person, please e-mail rec@dcu.ie

(Paper version) Indicate you are happy to complete the survey and turn over the page to begin.

I have read this information sheet and I am happy to complete the survey YES/NO

Describe your main occupation

How many years have you been in that occupation?

0-5 years

6-10 years

11-20 years

More than 20 years

Please describe the place you are mostly based for work

Rural

Urban

Town/city

Please describe the setting you are mostly based for work:

Early Years

Primary

Second Level

Third level

Community setting

Other (please give details) _____

Please indicate your gender M/F/Other/ Prefer not to say

Are you a qualified FS leader? Yes/ No/ In training/ Intend to train/ Other (please specify)

Please read each statement and state as honestly as you can your views right now, using the scale form 1-5 below. There are no right or wrong answers.

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

NEP1 We are approaching the limit of the number of people the earth can support

1	2	3	4	5

NEP2 Humans have the right to modify the natural environment to suit their needs

1	2	3	4	5

NEP3 When humans interfere with nature it often produces disastrous consequences

1	2	3	4	5

***NEP4** Human ingenuity will ensure that we do not destroy the earth

1	2	3	4	5

NEP5 Humans are severely abusing the environment

1	2	3	4	5

***NEP6** The earth has plenty of natural resources if we just learn how to develop them

1	2	3	4	5

NEP7 Plants and animals have as much right as humans to exist

1	2	3	4	5

***NEP8** The balance of nature is strong enough to cope with the impacts of modern industry

1	2	3	4	5

NEP9 Despite our special abilities' humans are still subject to the laws of nature

1	2	3	4	5

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

NEP11 The earth is like a spaceship with very limited room and resources

1	2	3	4	5

***NEP12** Humans were meant to rule over the rest of nature

1	2	3	4	5

NEP13 The balance of nature is very delicate and easily upset

1	2	3	4	5

***NEP14** Humans will eventually learn enough about how nature works to be able to control it

1	2	3	4	5

NR62 I always think about how my actions affect the environment.

1	2	3	4	5

NR63 My connection to nature and the environment is a part of my spirituality.

1	2	3	4	5

NR65 My relationship to nature is an important part of who I am

1	2	3	4	5

NR66 I feel very connected to all living things on earth

1	2	3	4	5

CNS1 I often feel a sense of oneness with the natural world

1	2	3	4	5

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

CNS 2 I think of the natural world as a community to which I belong

1	2	3	4	5

CNS 3 I recognize and appreciate the intelligence of other living organisms

1	2	3	4	5

***CNS 4** I often feel disconnected from nature

1	2	3	4	5

CNS 8 I have a deep understanding of how my actions affect the natural world

1	2	3	4	5

CNS 10 I feel that all inhabitants of Earth, human and animals/plants, share a common 'life force'.

1	2	3	4	5

CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world

1	2	3	4	5

***CNS 12** When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature

1	2	3	4	5

CNS 13 I often feel like I am only a small part of the natural world around me.

1	2	3	4	5

In the last year, have you taken part in any environmental activities and actions (e.g. a workshop or event; a protest/rally/petition about an environmental issue, joined an environmental group, financially supported an environmental cause)?

Yes	No

In the last year, have you organised any environmental activities and actions (e.g. a workshop or event; a social media or letter writing campaign, fundraising, a protest/rally/petition/community event about an environmental cause)?

Yes	No

Thinking about your main occupation, please read the following statements and state as honestly as you can your views right now, using the scale from 1 to 5 as shown below. This part of the survey is to do with beliefs about teaching and learning.

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

S1 It is important that an adult can see every child at all times

1	2	3	4	5

S2 I don't mind children getting muddy and wet

1	2	3	4	5

S3 It is more difficult for staff to manage behaviour out of doors than indoors

1	2	3	4	5

S4 Children should be allowed to climb trees if they feel safe doing so

1	2	3	4	5

S5 I would be concerned if a child was out of sight of an adult

1	2	3	4	5

S8 Children who are allowed to take risks at a young age will take risks as teenagers.

1	2	3	4	5

S11 If children use tools it is important they are not sharp

1	2	3	4	5

S12 Children should stay on task to meet the desired learning outcomes

1	2	3	4	5

S15 Children learn best when indoors in a controlled environment

1	2	3	4	5

PF1 The curriculum should be arranged according to subjects

1	2	3	4	5

PF2 Children learning from other children is an important part of any learning environment

1	2	3	4	5

PF3 Schools should be sources of new social ideas

1	2	3	4	5

PF6 There are essential skills all children must learn in school

1	2	3	4	5

PF8 Children should be allowed more freedom in their learning activities at school.

1	2	3	4	5

PF9 Children need close supervision at all times

1	2	3	4	5

PF10 Teachers should be facilitators of learning

1	2	3	4	5

PF11 Factual knowledge is an important component of any learning

1	2	3	4	5

PF12 Learning skills and knowledge through repetition is a good way of learning

1	2	3	4	5

PF14 Children should play an active part in curriculum design and evaluation

1	2	3	4	5

PF15 There are essential pieces of knowledge that all children should know

1	2	3	4	5

PF16 Children should be taught at his/her level and not at the level of the class she/he is in.

1	2	3	4	5

PF17 The curriculum should focus on social problems and issues

1	2	3	4	5

PF19 The teacher should be a strong authority figure in the classroom

1	2	3	4	5

PF22 Children are usually not capable of solving their problems through logical reasoning

1	2	3	4	5

PF27A few children in schools are just trouble makers

1	2	3	4	5

Learning about the natural world should be an important part of every child's upbringing

1	2	3	4	5

PF30 Children don't know the difference between democracy and anarchy in the classroom .

1	2	3	4	5

KKW17 I am able to work well by myself

1	2	3	4	5

KKW18 I prefer to make my own decisions about how to do something at work

1	2	3	4	5

KKW19 I enjoy collaborative approaches at work

1	2	3	4	5

KKW20 It's important to listen well to others to get things done

1	2	3	4	5

KKW21 It is important to help other people in life

1	2	3	4	5

KKW22 I accept help when I need it at work

1	2	3	4	5

KKW23 I am generally confident in working with new people

1	2	3	4	5

KKW24 I am generally confident in working with new people

1	2	3	4	5

Please answer the following questions as fully as you can.

1. How would you describe Forest School to someone who had never heard of it?
2. How did you become involved in/ interested in/hear about Forest School?
3. From your experience, what do you need to introduce Forest School into a setting?
4. What do you think is distinctive about Forest School as an approach?

Please indicate your age group 18-30/ 30-45/45-60/ 60+

Please describe your educational background/ qualifications

Thank you for completing this survey. As you know this is a pilot phase of the study. Any comments on the survey design would be most welcome!

Please add any further comments here

Appendix R

The National Survey

Thank you for agreeing to complete this survey about Forest School. The survey will take approximately 15/ 20 minutes.

The purpose of the study is to find out what is distinctive about Forest School according to adults who are interested in Forest School in Ireland. In particular, how Forest School pedagogy can help education systems to achieve the goal of a more sustainable society.

The results of this study will contribute to my PhD research and may also be published in conference proceedings and academic papers. Full ethical approval has been granted for this research from DCU.

By taking part in this research you will contribute to better understanding of Forest School in the Irish Primary school context. I assure you of my commitment to doing this research to the best of my ability, with integrity, transparency and honesty.

Yours sincerely,

Joan (Whelan)

Please read the points below before you begin:

How will I protect your privacy?

All information will be treated confidentially. The survey will be anonymous. However, confidentiality can only be protected within the limitations of the law.

Can you withdraw consent to take part?

You can leave the survey at any stage. However, once you have submitted your response it will not be possible to extract your data as the survey is anonymous.

What will I do with your data?

On completion of the study, all data will be held securely for a period of 5 years post publication of the PhD thesis, after which time all of the data will be destroyed.

What about General Data Protection Regulations (GDPR)?

Your data will be collected, stored and processed in compliance with General Data Protection Regulation. The DCU Data Controller details are as follows: Mr. Martin Ward (data.protection@dcu.ie Ph: 7005118 / 7008257)

How can you find out more about the research?

You will be free to request details regarding the findings from the research once it is complete. I can be contacted at joanwhelan43@mail.dcu.ie

Who do you contact if you have concerns about this study?

If you have concerns about this study and wish to contact an independent person, please e-mail rec@dcu.ie

Please tick the box

☐

I have read this information sheet and I am happy to complete the survey

Describe your main occupation

How many years have you been in that occupation?

0-5 years

6-10 years

11-20 years

More than 20 years

Please describe the place you are mostly based for work:

Rural

Urban

Town/city

Please describe the setting you are mostly based for work:

Early Years

Primary

Second Level

Third level

Community setting

Other (please give details) _____

Please indicate your gender Male /Female /Other/ Prefer not to say

Are you a qualified FS leader? Yes/ No/ In training/ Intend to train/ Other (please specify)

Please read each statement and state as honestly as you can your views right now, using the scale form 1-5 below. There are no right or wrong answers.

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

We are approaching the limit of the number of people the earth can support

1	2	3	4	5

Humans have the right to modify the natural environment to suit their needs

1	2	3	4	5

When humans interfere with nature it often produces disastrous consequences

1	2	3	4	5

Human ingenuity will ensure that we do not make the earth unlivable

1	2	3	4	5

Humans are severely abusing the environment

1	2	3	4	5

The earth has plenty of natural resources if we just learn how to develop them

1	2	3	4	5

Plants and animals have as much right as humans to exist

1	2	3	4	5

The balance of nature is strong enough to cope with the impacts of modern industry

1	2	3	4	5

Despite our 'special abilities', humans are still subject to the laws of nature

1	2	3	4	5

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

The so-called “ecological crisis” facing humankind has been greatly exaggerated

1	2	3	4	5

The earth is like a spaceship with very limited room and resources

1	2	3	4	5

Humans were meant to rule over the rest of nature

1	2	3	4	5

The balance of nature is very delicate and easily upset

1	2	3	4	5

Humans will eventually learn enough about how nature works to be able to control it

1	2	3	4	5

If things continue on their present course, we will experience a major ecological catastrophe

1	2	3	4	5

I often feel a sense of oneness with the natural world

1	2	3	4	5

I think of the natural world as a community to which I belong

1	2	3	4	5

I recognize and appreciate the intelligence of other living organisms

1	2	3	4	5

I often feel disconnected from nature

1	2	3	4	5

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

When I think of my life, I imagine myself to be part of a larger cyclical process of living.

1	2	3	4	5

I often feel a kinship with animals and plants.

1	2	3	4	5

I feel as though I belong to the Earth as equally as it belongs to me

1	2	3	4	5

I have a deep understanding of how my actions affect the natural world

1	2	3	4	5

I often feel part of the web of life

1	2	3	4	5

I feel that all inhabitants of Earth, human and animals/plants, share a common 'life force'.

1	2	3	4	5

Like a tree can be part of a forest, I feel embedded within the broader natural world

1	2	3	4	5

When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature

1	2	3	4	5

I often feel like I am only a small part of the natural world around me.

1	2	3	4	5

My personal welfare is independent of the welfare of the natural world

1	2	3	4	5

In the last year, have you taken part in any environmental activities and actions (e.g. a workshop or event; a protest/rally/petition about an environmental issue, joined an environmental group, financially supported an environmental cause)?

Yes	No

In the last year, have you organised any environmental activities and actions (e.g. a workshop or event; a social media or letter writing campaign, fundraising, a protest/rally/petition/community event about an environmental cause)?

Yes	No

Thinking about your main occupation, please read the following statements and state as honestly as you can your views right now, using the scale from 1 to 5 as shown below. This part of the survey is to do with beliefs about teaching and learning.

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

It is important that an adult can see every child at all times

1	2	3	4	5

I don't mind children getting muddy and wet

1	2	3	4	5

It is more difficult for staff to manage behaviour out of doors than indoors

1	2	3	4	5

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

Children should be allowed to climb trees if they feel safe doing so

1	2	3	4	5

I would be concerned if a child was out of sight of an adult

1	2	3	4	5

Children who are allowed to take risks at a young age will take risks as teenagers.

1	2	3	4	5

If children use tools it is important they are not sharp

1	2	3	4	5

When they are walking off the school grounds, children should hold hands

1	2	3	4	5

Children can be taught to use knives as part of outdoor learning from an early age

1	2	3	4	5

Children learn best when indoors in a controlled environment

1	2	3	4	5

The curriculum should be arranged according to subjects

1	2	3	4	5

Children learning from other children is an important part of any learning environment

1	2	3	4	5

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

Schools should be sources of new social ideas

1	2	3	4	5

Demonstration and recitation are essential components of learning

1	2	3	4	5

Schools exist to facilitate the development of self-awareness

1	2	3	4	5

There are essential skills all children must learn in school

1	2	3	4	5

Teaching should centre on the inquiry approach

1	2	3	4	5

Children should be allowed more freedom in their learning activities at school.

1	2	3	4	5

Children need close supervision at all times

1	2	3	4	5

Teachers should be facilitators of learning

1	2	3	4	5

Factual knowledge is an important component of any learning

1	2	3	4	5

Learning skills and knowledge through repetition is a good way of learning

1	2	3	4	5

1 Strongly disagree/ 2 Disagree/ 3 Neither agree nor disagree/ 4 Agree/ 5 Strongly agree

Ideal teachers are constant questioners

1	2	3	4	5

Children should play an active part in curriculum design and evaluation

1	2	3	4	5

There are essential pieces of knowledge that all children should know

1	2	3	4	5

Children should be taught at his/her level and not at the level of the class she/he is in.

1	2	3	4	5

The curriculum should focus on social problems and issues

1	2	3	4	5

The teacher should be a strong authority figure in the classroom

1	2	3	4	5

Learning about the natural world should be an important part of every child's upbringing

1	2	3	4	5

I am able to work well by myself

1	2	3	4	5

I prefer to make my own decisions about how to do something at work

1	2	3	4	5

I take part confidently in collaborative approaches at work

1	2	3	4	5

It's important to listen well to others to get things done

1	2	3	4	5

I accept help when I need it at work

1	2	3	4	5

Please answer the following questions as fully as you can. Please continue on the back of the page if you need more space.

- 1. How would you describe Forest School to someone who had never heard of it?**

- 2. How did you become involved in/ interested in/hear about Forest School?**

- 3. From your experience, what do you need to introduce Forest School into a setting?**

- 4. What do you think is distinctive about Forest School as an approach?**

- 5. How would you describe good teaching (in any context)?**

Please indicate your age group 18-30/ 31-45/46-60/ 60+

Please describe your educational background/ qualifications

Thank you for completing this survey. Your help is much appreciated.

Please add any further comments overleaf.

Appendix S

List of Initial codes and Code Mapping

List of Codes

1. Unique or particular things about FS – General
2. Activities in FS
3. Adult led intervention or interaction or teaching moment
4. Adult reflection on being involved in FS
5. Age and stage of kids
6. Aim of FS for these children
7. Approach to learning and pedagogy in FS
8. Assessment and Progress
9. Attendance and size of group and PT ratio
10. Awareness of the senses
11. Child initiated Activity or interaction or question
12. Children's attitudes to FS
13. Choice
14. Community interactions
15. Conversations between adults and children
16. Conversations between children
17. Conversations between the adults
- 18. Covid 19**
19. Definition of FS
20. Differences between being in the forest and being in the classroom
- 21. Difficulties and constraints**
22. Emergent planning
- 23. Events and incidents**
24. Experiential learning
25. Feelings associated with FS
26. FS and Friends
27. FS feelings of ownership of the site
28. FS site characteristics

29. Fun
30. Gender
31. Golden Moments
32. Home school links
33. How the staff describe the children
34. Human nature relationship
35. Impact of FS
36. Impact of the Adult personnel
37. Informal interactions with adults and children
38. Jobs
39. Links and Integration with regular curriculum and classroom
40. Long term engagement in FS
41. Memories of FS
42. Mindfulness and sit spots
43. Movement and physical activity
44. Observing well
45. Organising for FS practical issues
46. Parent comments about FS
47. Partners and formal groupings for FS
48. Quality of the FS sessions
49. Questions asked by children
50. Reason for doing FS
51. References to Nature
52. Reflections in the field.
53. Reflexivity and Role of researcher
54. Relationship between children and adults
55. Relationship between the Adults leading the sessions
56. Relationship building in FS
57. Relationships between children
58. Research and Evidence
59. Researcher conversations in the field with the adults
60. Researcher reflections after the session
61. Resources practical

62. Review and reflect
63. Review using Photos and video
64. Role of DES in curriculum development and learning outdoors
65. Routines Games in FS
66. Routines in FS - arrival and getting ready at the school
67. Routines in FS - boundaries
68. Routines in FS - response to calls
69. Routines in FS - Tools and ropes
70. Routines in FS Diary time and diary excerpts from FG kids.
71. Routines in FS Free time or free play
72. Routines in FS Main Activity
73. Routines in FS suited and booted
74. Routines of FS - Closing circle
75. Routines of FS The journey to FS
76. Routines of FS Adult group review and plan
77. Routines of FS arrival in the forest
78. Routines of FS Closing circle and review
79. Routines of FS lunchtime
80. Routines of FS Opening Circle
81. Routines of FS Risk assessment
82. Routines of FS Storytelling as an activity
83. Rules in FS
84. Skillset of those adults leading the session
85. Sounds
86. Spontaneity
87. Staffing
88. Strategies for individual children
89. Success in FS
90. Suggestions to improve FS
- 91. Talk in FS**
92. Teaching interventions by school staff
93. The Elements and basic needs
94. Things they did not like about FS or Low points

95. Things they liked about FS or high points

96. Things you can achieve in FS

97. Things you learn in FS

98. Things you need for FS to happen

99. Time

100. Traits taking CARE

101. Traits - confidence

102. Traits - Perseverance

103. Traits - Respect

104. Traits - taking responsibility

105. Traits Attention and engagement

106. Traits Creativity and Creative play

107. Traits Discipline and behaviour

108. Traits Gratitude

109. Traits in FS Curiosity

110. Traits Listening

111. Traits Negotiation

112. Traits Trust

113. types of groups and interactions

114. Unique or particular things about FS in Bay School

115. Weather

116. Words associated with FS

Code Mapping

Routines of FS

(Codes 38, 42, 43, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 92, 113).

Pedagogical Approaches

(Codes 2, 3, 7, 9)

Review and Assessment

(Codes 8, 44, 48, 62, 63, 65, 88, 89, 90).

Definitions and Aim of FS

(Codes 4, 5, 6, 19, 22, 35, 39, 45, 50, 52, 53, 59, 61, 96, 97, 98).

The Child

(Codes 2, 5, 11, 12, 13, 16, 26, 29, 30, 37, 41, 47, 49, 57, 88, 94, 95, 97, 113, 116).

Nature

(Codes 1, 10, 19, 20, 24, 27, 28, 34, 51, 85, 93, 114, 115).

The Teacher

(Codes 3, 4, 7, 15, 17, 31, 33, 36, 37, 39, 44, 54, 55, 62, 76, 84, 87, 92).

Traits,

(Codes 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112)

Wider Community

(Codes 9, 14, 25, 32, 40, 46, 56, 64, 86, 89, 90)

Researcher reflections

(Codes 52, 53, 58, 59, 60).

The remaining codes **Time, Events and Incidents, Difficulties and Constraints, Covid 19, Talk in FS** (18, 21, 23, 91, 99) were reviewed individually.

Where a code has more than one colour it was coded to each of these codes

Appendix T

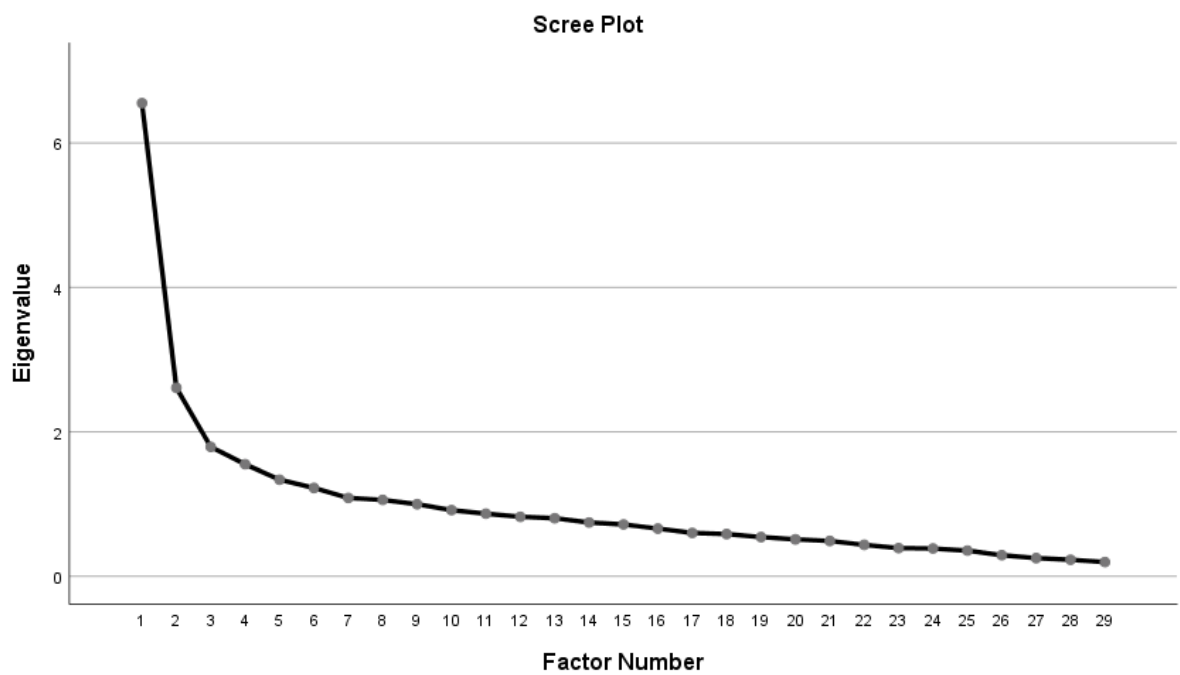
Initial Statistical Steps for EFA

EFA Environment Items Solution

First time with all 29 items

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.819
Bartlett's Test of Sphericity	Approx. Chi-Square	2142.007
	df	406
	Sig.	.000



Factor Matrix^a

	Factor							
	1	2	3	4	5	6	7	8
NEP7P Plants and animals have as much right as humans to exist	.518			.441				
NEP12 O Humans were meant to rule over the rest of nature	-							
	.498							
CNS1 I feel a sense of oneness with the natural world	.746							
CNS2 I think of the natural world as a community to which I belong	.733							
CNS3 I recognize and appreciate the intelligence of other living organisms	.719							
CNS5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	.605							
CNS6 I often feel a kinship with animals and plants	.708							
CNS7 I feel as though I belong to the earth as equally as it belongs to me	.570							
CNS8 I have a deep understanding of how my actions affect the natural world	.443							
CNS9 I often feel part of the web of life	.661							
CNS10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.646							
CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world	.748							
CNS12 O When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature								
NEP1 P We are approaching the limit of the number of people the Earth can support								
NEP2 O Humans have the right to modify the natural environment to suit their needs								
NEP3 P When humans interferes with nature it often produces disastrous consequences								
NEP4 O Human ingenuity will ensure that we do not make the Earth unliveable								
NEP5 P Humans are severely abusing the environment								
NEP6 O The earth has plenty of natural resources if we just learn how to develop them								
NEP8 O The balance of nature is strong enough to cope with the impacts of modern industry								

NEP9 P Despite our 'special abilities', humans are still subject to the laws of nature									
NEP10 O The socalled ecological crisis facing humankind has been greatly exaggerated									
NEP11P The earth is like a space ship with very limited room and resources			.450						
NEP13 PThe balance of nature is very delicate and easily upset									
NEP14 O Humans will eventually learn enough about how nature works to be able to control it									
NEP15 P If things continue on their present course, we will experience a major ecological catastrophe									
CNS4 O I often feel disconnected from nature									
CNS13 I often feel like I am only a small part of the natural world around me		.410							
CNS 14 O My personal welfare is independent of the welfare of the natural world									

Extraction Method: Principal Axis Factoring.

a. Attempted to extract 8 factors. More than 25 iterations required. (Convergence=.002). Extraction was terminated.

Total Variance Explained

Factor	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total
1	6.111	21.072	21.072	4.878
2	2.031	7.004	28.076	2.912
3	1.206	4.159	32.235	1.412
4	1.003	3.457	35.692	.919
5	.723	2.492	38.184	1.317
6	.590	2.035	40.219	2.083
7	.549	1.891	42.111	1.292
8	.501	1.727	43.838	3.020

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix^a

	Factor							
	1	2	3	4	5	6	7	8
NEP7P Plants and animals have as much right as humans to exist				.455				
NEP12 O Humans were meant to rule over the rest of nature		.683						
CNS1 I feel a sense of oneness with the natural world								.497
CNS2 I think of the natural world as a community to which I belong								.623
CNS3 I recognize and appreciate the intelligence of other living organisms								.515
CNS5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	.467							
CNS6 I often feel a kinship with animals and plants								.412
CNS7 I feel as though I belong to the earth as equally as it belongs to me	.527							
CNS8 I have a deep understanding of how my actions affect the natural world	.560							
CNS9 I often feel part of the web of life	.765							
CNS10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.632							
CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world	.924							
CNS12 O When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature		.642						
NEP1 P We are approaching the limit of the number of people the Earth can support								
NEP2 O Humans have the right to modify the natural environment to suit their needs		.447						
NEP3 P When humans interferes with nature it often produces disastrous consequences						-		
						.557		
NEP4 O Human ingenuity will ensure that we do not make the Earth unliveable								
NEP5 P Humans are severely abusing the environment						-		
						.627		
NEP6 O The earth has plenty of natural resources if we just learn how to develop them								

NEP8 O The balance of nature is strong enough to cope with the impacts of modern industry		.404						
NEP9 P Despite our 'special abilities', humans are still subject to the laws of nature							.501	
NEP10 O The socalled ecological crisis facing humankind has been greatly exaggerated								
NEP11P The earth is like a space ship with very limited room and resources			.805					
NEP13 PThe balance of nature is very delicate and easily upset			.408					
NEP14 O Humans will eventually learn enough about how nature works to be able to control it								
NEP15 P If things continue on their present course, we will experience a major ecological catastrophe								
CNS4 O I often feel disconnected from nature								
CNS13 I often feel like I am only a small part of the natural world around me				.438				
CNS 14 O My personal welfare is independent of the welfare of the natural world					.528			

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 22 iterations.

Analysis:

Three factors:

Factor 1 Human Nature connection

CNS5/CNS7/CNS8/CNS9/CNS10/CNS11

Factor 2 Human Rule over nature

NEP12/CNS12/NEP2/NEP8

Factor 3 Balance of Nature

NEP11/NEP13

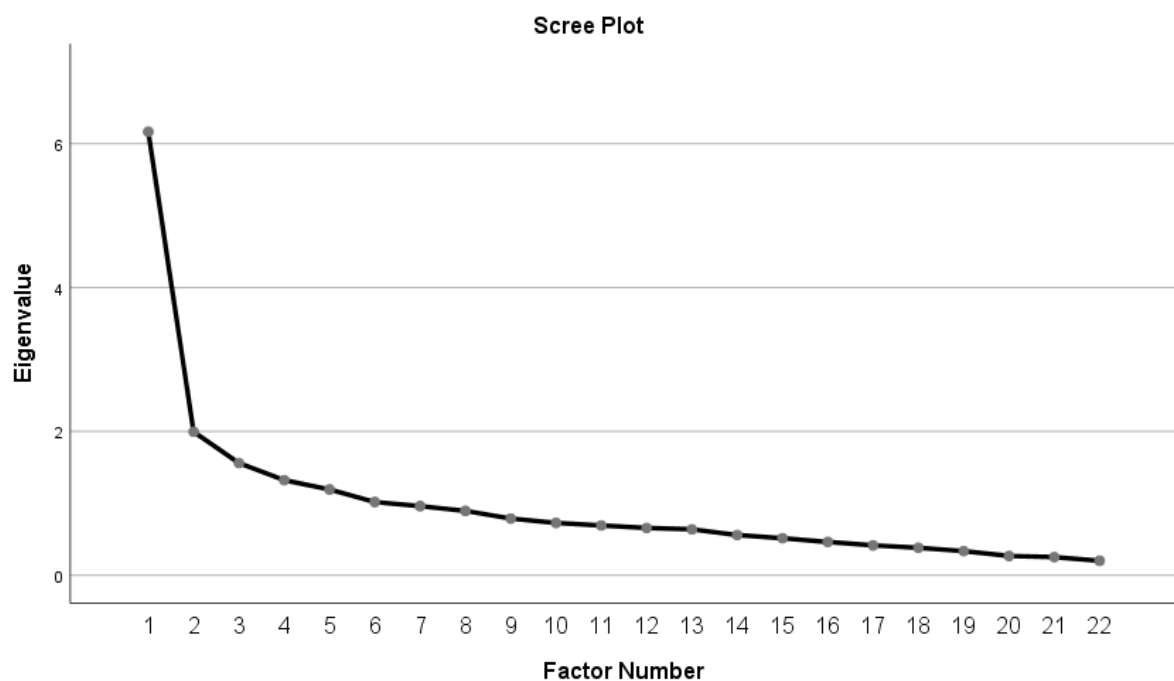
I deleted 7 items NEP1/NEP4/NEP6/NEP10/NEP14/NEP15/CNS4

I then ran the EFA again

FA 2 Output with 7 items deleted

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.843
Bartlett's Test of Sphericity	Approx. Chi-Square	1730.682
	df	231
	Sig.	.000



Factor Matrix^a

		Factor					
		1	2	3	4	5	6
NEP7P Plants and animals have as much right as humans to exist	.512						
NEP12 O Humans were meant to rule over the rest of nature	-.473	.451					
CNS1 I feel a sense of oneness with the natural world	.756						
CNS2 I think of the natural world as a community to which I belong	.750						
CNS3 I recognize and appreciate the intelligence of other living organisms	.731						
CNS5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	.612						
CNS6 I often feel a kinship with animals and plants	.715						
CNS7 I feel as though I belong to the earth as equally as it belongs to me	.587						
CNS8 I have a deep understanding of how my actions affect the natural world	.448						
CNS9 I often feel part of the web of life	.679						
CNS10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.660						
CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world	.771						
CNS12 O When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature		.458					
NEP2 O Humans have the right to modify the natural environment to suit their needs							
NEP3 P When humans interferes with nature it often produces disastrous consequences							
NEP5 P Humans are severely abusing the environment							
NEP8 O The balance of nature is strong enough to cope with the impacts of modern industry							
NEP9 P Despite our 'special abilities', humans are still subject to the laws of nature							
NEP11P The earth is like a space ship with very limited room and resources			.431				
NEP13 P The balance of nature is very delicate and easily upset			.498				
CNS13 I often feel like I am only a small part of the natural world around me	.410						

CNS 14 O My personal welfare is independent of the welfare of the natural world						

Extraction Method: Principal Axis Factoring.

a. 6 factors extracted. 16 iterations required.

Total Variance Explained

Factor	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total
1	5.725	26.023	26.023	5.142
2	1.431	6.504	32.526	2.767
3	.962	4.374	36.900	.943
4	.698	3.175	40.075	2.323
5	.543	2.469	42.544	.645
6	.451	2.050	44.594	.982

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix^a

	Factor					
	1	2	3	4	5	6
NEP7P Plants and animals have as much right as humans to exist		- .411				
NEP12 O Humans were meant to rule over the rest of nature		.737				
CNS1 I feel a sense of oneness with the natural world	.550					
CNS2 I think of the natural world as a community to which I belong	.518					
CNS3 I recognize and appreciate the intelligence of other living organisms	.423					
CNS5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	.581					
CNS6 I often feel a kinship with animals and plants	.570					
CNS7 I feel as though I belong to the earth as equally as it belongs to me	.632					
CNS8 I have a deep understanding of how my actions affect the natural world	.532					
CNS9 I often feel part of the web of life	.811					
CNS10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.662					

CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world	.931					
CNS12 O When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature		.610				
NEP2 O Humans have the right to modify the natural environment to suit their needs		.420				
NEP3 P When humans interferes with nature it often produces disastrous consequences				.573		
NEP5 P Humans are severely abusing the environment				.607		
NEP8 O The balance of nature is strong enough to cope with the impacts of modern industry						
NEP9 P Despite our 'special abilities', humans are still subject to the laws of nature						
NEP11P The earth is like a space ship with very limited room and resources			.491			
NEP13 P The balance of nature is very delicate and easily upset			.630			
CNS13 I often feel like I am only a small part of the natural world around me						
CNS 14 O My personal welfare is independent of the welfare of the natural world						.468

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

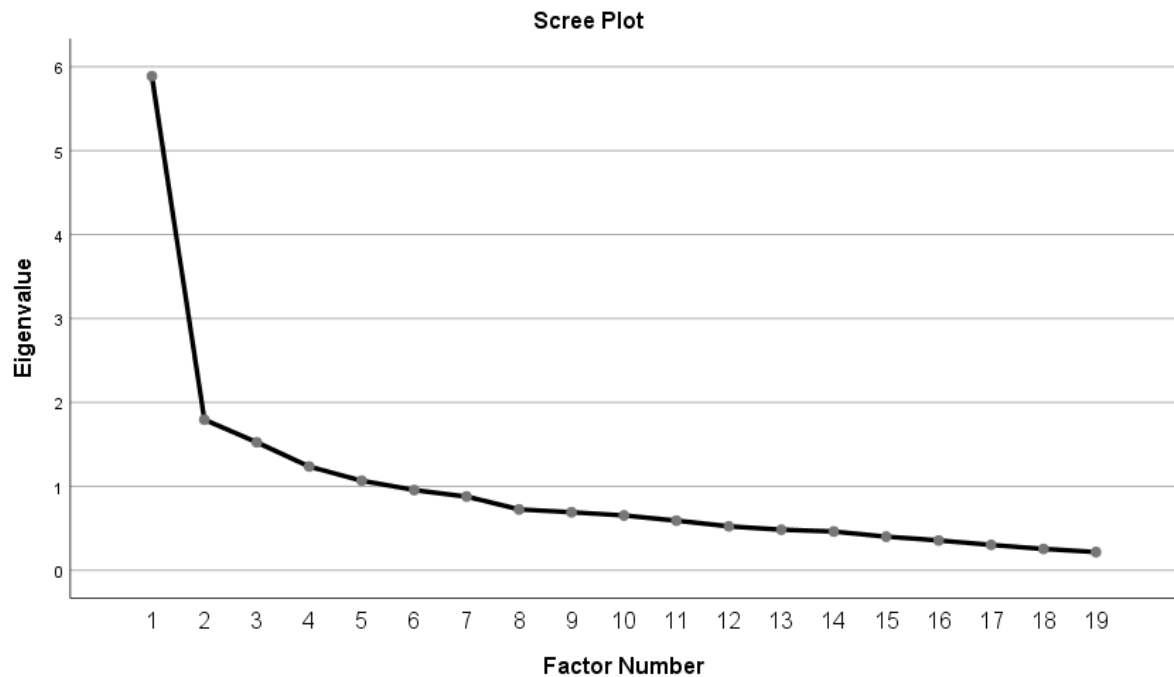
a. Rotation converged in 15 iterations.

Factor Analysis 3

3 further items were deleted (NEP 8/ NEP9/ CNS13)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.857
Bartlett's Test of Sphericity	Approx. Chi-Square	1556.910
	df	171
	Sig.	.000



Factor Matrix^a

	Factor				
	1	2	3	4	5
NEP7P Plants and animals have as much right as humans to exist	.486				
NEP12 O Humans were meant to rule over the rest of nature	-.471	.560			
CNS1 I feel a sense of oneness with the natural world	.762				
CNS2 I think of the natural world as a community to which I belong	.761				
CNS3 I recognize and appreciate the intelligence of other living organisms	.728				
CNS5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	.617				
CNS6 I often feel a kinship with animals and plants	.724				

CNS7 I feel as though I belong to the earth as equally as it belongs to me	.600				
CNS8 I have a deep understanding of how my actions affect the natural world	.455				
CNS9 I often feel part of the web of life	.681				
CNS10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.667				
CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world	.784				
CNS12 O When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature		.441			
NEP2 O Humans have the right to modify the natural environment to suit their needs					
NEP3 P When humans interferes with nature it often produces disasterous consequences					
NEP5 P Humans are severely abusing the environment					
NEP11P The earth is like a space ship with very limited room and resources			.579		
NEP13 P The balance of nature is very delicate and easily upset			.407		
CNS 14 O My personal welfare is independent of the welfare of the natural world					

Extraction Method: Principal Axis Factoring.

a. Attempted to extract 5 factors. More than 25 iterations required. (Convergence=.004).

Extraction was terminated.

Total Variance Explained

Factor	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total
1	5.461	28.742	28.742	4.567
2	1.268	6.675	35.417	2.498
3	.954	5.018	40.435	.933
4	.659	3.471	43.906	2.012
5	.420	2.210	46.116	2.931

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix^a

	1	2	Factor 3	4	5
NEP7P Plants and animals have as much right as humans to exist					
NEP12 O Humans were meant to rule over the rest of nature		.855			
CNS1 I feel a sense of oneness with the natural world					.435
CNS2 I think of the natural world as a community to which I belong					.624
CNS3 I recognize and appreciate the intelligence of other living organisms				.404	
CNS5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	.468				
CNS6 I often feel a kinship with animals and plants					.428
CNS7 I feel as though I belong to the earth as equally as it belongs to me	.490				
CNS8 I have a deep understanding of how my actions affect the natural world	.601				
CNS9 I often feel part of the web of life	.668				
CNS10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.663				

CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world	.947				
CNS12 O When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature		.612			
NEP2 O Humans have the right to modify the natural environment to suit their needs					
NEP3 P When humans interferes with nature it often produces disasterous consequences				.574	
NEP5 P Humans are severely abusing the environment				.585	
NEP11P The earth is like a space ship with very limited room and resources			.722		
NEP13 PThe balance of nature is very delicate and easily upset			.440		
CNS 14 O My personal welfare is independent of the welfare of the natural world					

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

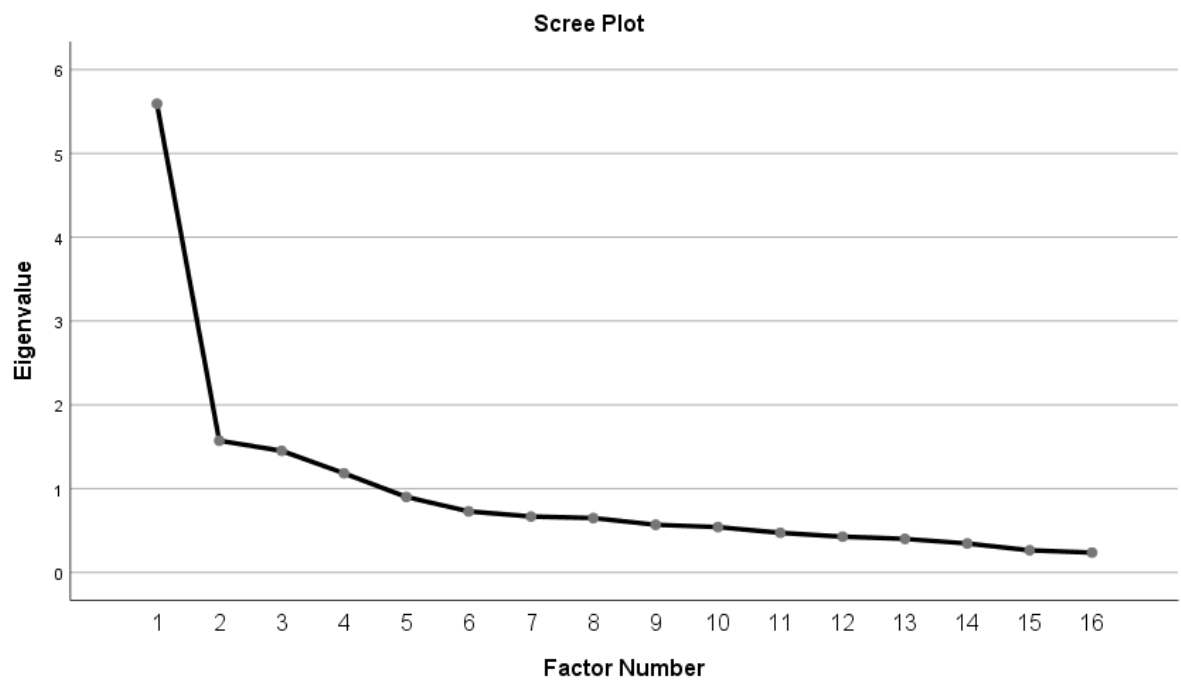
a. Rotation converged in 12 iterations.

I removed three further items NEP7/NEP2/CNS14

Fourth EFA FINAL

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.873
Bartlett's Test of Sphericity	Approx. Chi-Square	1365.588
	df	120
	Sig.	.000



Factor Matrix^a

	Factor			
	1	2	3	4
NEP12 O Humans were meant to rule over the rest of nature	- .433	.535		
CNS1 I feel a sense of oneness with the natural world	.769			
CNS2 I think of the natural world as a community to which I belong	.751			
CNS3 I recognize and appreciate the intelligence of other living organisms	.706			
CNS5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	.628			
CNS6 I often feel a kinship with animals and plants	.726			
CNS7 I feel as though I belong to the earth as equally as it belongs to me	.617			
CNS8 I have a deep understanding of how my actions affect the natural world	.463			
CNS9 I often feel part of the web of life	.700			
CNS10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.673			
CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world	.786			
CNS12 O When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature		.470		
NEP3 P When humans interfere with nature it often produces disastrous consequences				
NEP5 P Humans are severely abusing the environment				
NEP11P The earth is like a space ship with very limited room and resources			.449	
NEP13 P The balance of nature is very delicate and easily upset			.408	

Extraction Method: Principal Axis Factoring.

a. 4 factors extracted. 22 iterations required.

Total Variance Explained

Factor	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total
1	5.143	32.145	32.145	4.906
2	1.013	6.332	38.478	2.173
3	.863	5.394	43.872	.828
4	.597	3.731	47.603	1.533

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix^a

	Factor			
	1	2	3	4
NEP12 O Humans were meant to rule over the rest of nature		.793		
CNS1 I feel a sense of oneness with the natural world	.600			
CNS2 I think of the natural world as a community to which I belong	.599			
CNS3 I recognize and appreciate the intelligence of other living organisms	.460			
CNS5 When I think of my life, I imagine myself to be part of a larger cyclical process of living	.618			
CNS6 I often feel a kinship with animals and plants	.621			
CNS7 I feel as though I belong to the earth as equally as it belongs to me	.666			
CNS8 I have a deep understanding of how my actions affect the natural world	.501			
CNS9 I often feel part of the web of life	.846			
CNS10 I feel that all inhabitants of Earth, human and animals/ plants, share a common 'life force'	.664			
CNS11 Like a tree can be part of a forest, I feel embedded within the broader natural world	.856			
CNS12 O When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature		.628		

NEP3 P When humans interfere with nature it often produces disastrous consequences				.597
NEP5 P Humans are severely abusing the environment				.605
NEP11P The earth is like a space ship with very limited room and resources			.547	
NEP13 PThe balance of nature is very delicate and easily upset			.466	

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Principal Axis Factoring with oblimin rotation **(10 items), named Nature Connection, was extracted.**

Reliability Statistics

	Cronbach's	N of
Alpha	Items	
	.894	10

I then examined the factor matrix. I picked up 2 items NEP7P and CNS 13.

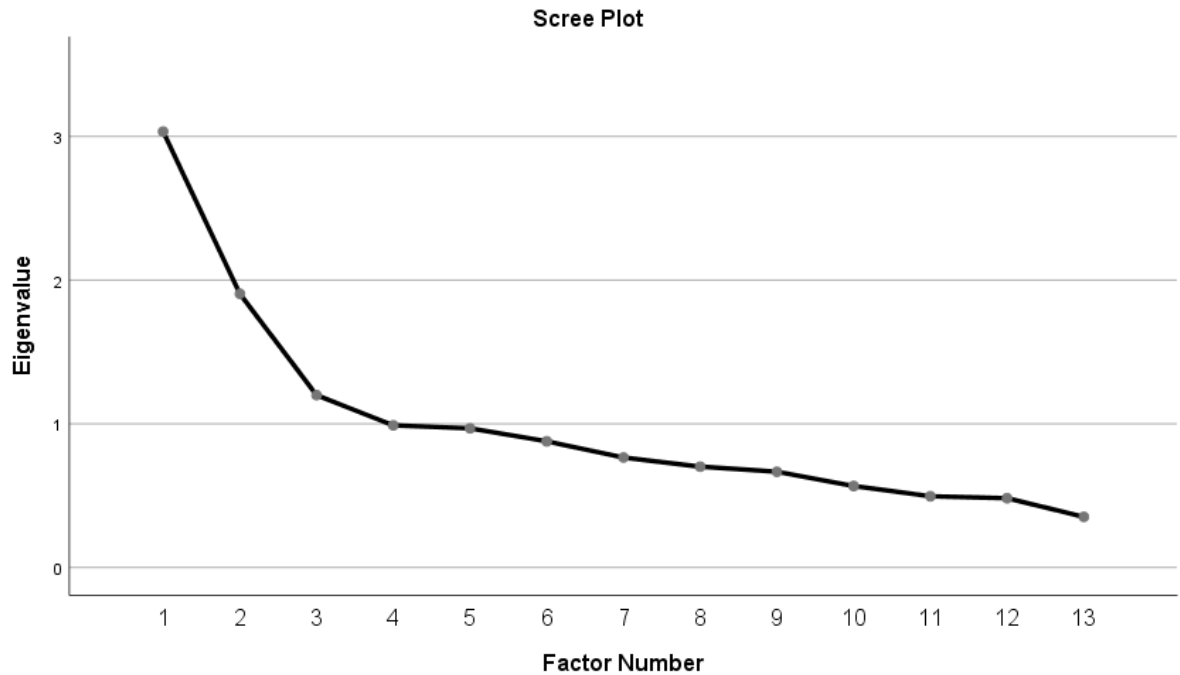
At this point, a single factor unrotated solution will be sought.

The final single scale comprised 12 items named 'Nature Connection'.

Pedagogy Items (18)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.723
Bartlett's Test of Sphericity	Approx. Chi-Square	522.239
	df	78
	Sig.	.000



Pattern Matrix^a

	Factor		
	1	2	3
P6 T3 O There are essential skills all children must learn in school	.621		
P18 T8 O The teacher should be a strong authority figure in the classroom	.600		
P9 T4 O Children need close supervision at all times	.571		
P11 T5 O Factual knowledge is an important component of any learning	.472		
P1 T1 O The curriculum should be arranged according to subjects	.450		
P15 T7 O There are essential pieces of knowledge that all children should know	.412		
P8 R3 Children should be allowed more freedom in their learning activities at school	-.477	.559	

P14 R4 Children should play an active part in curriculum design and evaluation	- .369	.553	
P3 R1 Schools should be sources of new social ideas		.441	
P17 R5 The curriculum should focus on social problems and issues		.369	
P7 P2 Teaching should centre on the inquiry approach			
P12 T6 O Learning skills and knowledge through repetition is a good way of learning			- .799
P4 T2 O Demonstration and recitation are essential components of learning			

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 12 iterations.

Solution 2 factor

Factor 1 Traditional view

Reliability Statistics

Cronbach's Alpha	N of Items
.718	6

Factor 2 Contemporary view

Reliability Statistics

Cronbach's Alpha	N of Items
.616	3

At this point I am seeking a single factor unrotated solution and will go back to the factor matrix.

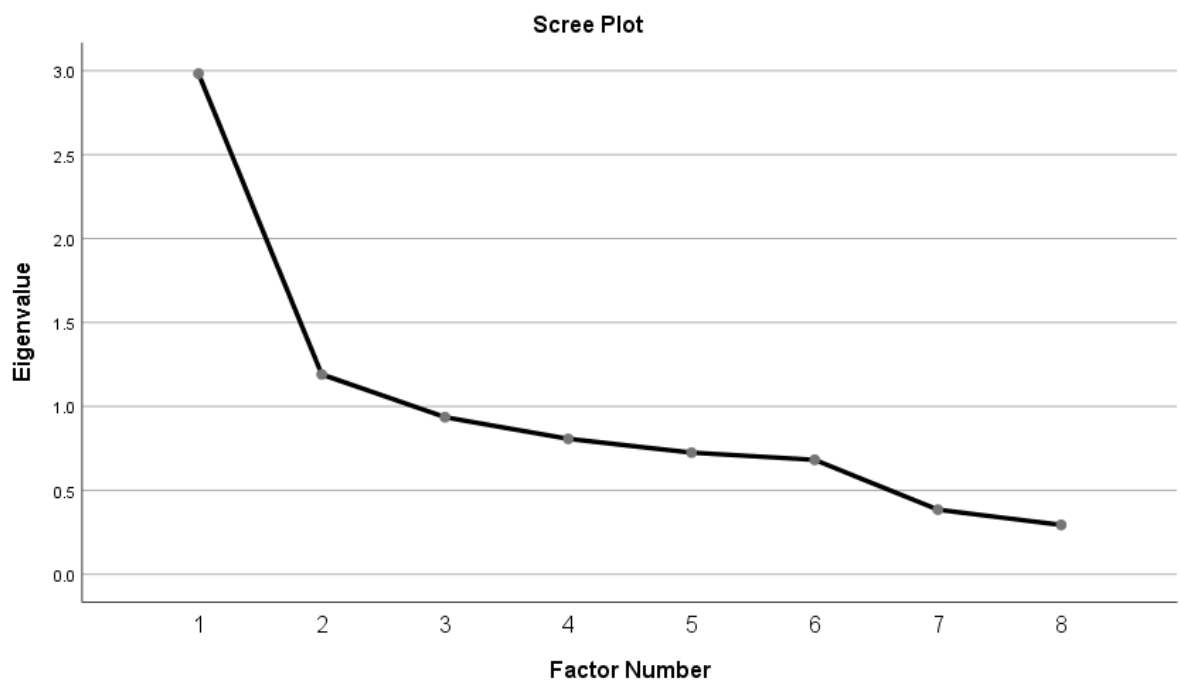
The final scale comprise a single factor with 7 items and was named 'Traditional Pedagogy'

Risk and Learning Outdoors Items (10)

Test items (10)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.742
Bartlett's Test of Sphericity	Approx. Chi-Square	432.135
	df	28
	Sig.	.000



Pattern Matrix^a

	Factor	
	1	2
S7 O If children use tools it is important they are not sharp	.641	
S9 Children can be taught to use knives as part of outdoor education from an early age.	.528	
S3 O It is more difficult for staff to manage behaviour out of doors than indoors	.526	

S4 Children should be allowed to climb trees if they feel safe doing so	.524	
S2 I don't mind children getting muddy and wet	.432	
S10 O Children learn best when indoors in a controlled environment		
S5 O I would be concerned if a child was out of sight of an adult		.871
S1 O It is important that an adult can see every child at all times		.743

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 5 iterations.

2 factor solution

Factor 1 Learning outdoors S7 S9 S3 S4 S2

Reliability Statistics

Cronbach's Alpha	N of Items
.693	5

Factor 2 Supervision S5 S1 – I have retained this even though there are only 2 items as they load strongly and it is an important theoretical idea.

Reliability Statistics

Cronbach's Alpha	N of Items
.803	2

This was my initial conclusion; however, on further inspection, I decided on a one factor solution as the second factor was weak and secondly, did not comprise a factor with only two items

Item P15 retained as it improved overall reliability of scale even though it did not reach .4 criteria and it fitted theoretically

The six items comprised a single factor called 'Risk and Learning Outdoors'

Appendix U

FS Curriculum Plan, Robins

Beforehand

Risk assess the forest area

Prepare equipment (Trolley, Tarps, boundaries. Rubbish bin)

Tools: Bow saw, Loppers- knives- peelers

(Emergency Bag, First aid kits, Wipes, emergency numbers)

Gloves diaries and bags

Make hot drinks and snack

Meet the children

Talk to the children about what will happen

Make sure we are all suited and booted

Children have their lunches, notebooks, and pencils in their bags

Walk to FS

Week 1

Opening circle and gratitude

Boundaries (Set out)- Risk Access

Activity- Explore

Check on their adopted tree and draw an art picture in your diary to represent your tree.

Re-introduce the tools talk about the safety of using the tools

Lunch

Free play

Finish off – Stretch out sit/lie and enjoy the peaceful surroundings

Teacher Story

Children's Review and closing circle

Week 2

Opening circle and gratitude

Boundaries (Set out)- Risk Access

Activity- Measure sticks out to make a small raft using twine natural materials and loppers. Launch our rafts in the fountain. Tool talk about the safety of using the tools

Lunch

Free play

Finish off – Stretch out sit/lie and enjoy the peaceful surroundings

Teacher Story

Children's Review and closing circle

Week 3

Opening circle and gratitude

Boundaries (Set out)- Risk Access

Activity- Go Find It? Drama woodland puppet show

Lunch

Free play

Finish off – Stretch out sit/lie and enjoy the peaceful surroundings

Teacher Story

Children's Review and closing circle

Week 4

Opening circle and gratitude

Boundaries (Set out)- Risk Access

Activity- Listening skills. Blindfolded Caterpillars. Mirror Reflection. Electrical Pulse

Lunch

Free play

Finish off – Stretch out sit/lie and enjoy the peaceful surroundings

Teacher Story

Children's Review and closing circle

Week 5

Opening circle and gratitude

Boundaries (Set out)- Risk Access

Activity- Leaf/ flower Print with cotton sheet.

Lunch

Free play

Finish off – Stretch out sit/lie and enjoy the peaceful surroundings

Teacher Story

Children's Review and closing circle

Week 6

Opening circle and gratitude

Boundaries (Set out)- Risk Access

Activity- Tree spirits (face), choose their adopted tree and use natural materials

Lunch

Free play

Finish off – Stretch out sit/lie and enjoy the peaceful surroundings

Teacher Story

Children's Review and closing circle

Week 7

Opening circle and gratitude

Boundaries (Set out)- Risk Access

Activity- Story Bag- collect items in the woods that represent forest school and tell a story with those items

Lunch

Free play

Finish off – Stretch out sit/lie and enjoy the peaceful surroundings

Teacher Story

Children's Review and closing circle

Week 8

Opening circle and gratitude

Boundaries (Set out)- Risk Access

Activity- Final day, go over what we did in FS

Lunch

Free play

Finish off – Stretch out sit/lie and enjoy the peaceful surroundings

Teacher Story

Children's Review and closing circle

Appendix V

Curriculum Linkage and FS Plan, Owls

Usáidfear Gaeilge Neamhfhoirmiúl tríd an cúrsa*	
WK 1 Opening/gratitude Risk Assess Boundaries (Children set out) SIT SPOT Explore area Timber Hitch 123 Game, Where are you? Today's Tool – Bow saw Lunch Diaries – creative writing Teacher Story: Irish Fairy Stories and Myths ó bhéal Children's review (led by Teacher) Adult group review (in school)	Curriculum Integration S.P.H.E. : Organisational skills/ Social skills Oral Lang P.E.- Games and outdoor and adventure Fine and Gross Motor Dev. Writing Genre: Recount *Gaeilge: Déanaigí line/ Cuir ort do chóta/ Cén sort aimsir?/ Tá sé ag cur báistí agus srl Maths: Spatial Awareness/ numbers
WK 2 Opening/gratitude Risk Assess Boundaries SIT SPOT Tools – Peelers/ knife Timber Hitch- Revise Teacher Story: Irish Fairy Stories and Myths ó bhéal Lunch Diaries: Creative writing Art through nature: create nature character and tell a story Children's review (led by Teacher) Adult group review (in school)	Curriculum Integration Creative writing S.P.H.E. Organisational skills Oral Lang P.E.- Games and outdoor and adventure Fine and Gross Motor Dev. English: Communicating (L.O.- Engagement and listening) Vis Arts: Creating art using the environment and imagination *Gaeilge: Scéalta agus aidiachtaí – Siógbeag/ Fathach mór / Crann glas
WK 3 Opening/gratitude Risk Assess Boundaries SIT SPOT Tools - Loppers Make badges – using the bow saw and hand drills Teach larks head hitch/ring hitch knot Lunch Diaries	Curriculum Integration S.P.H.E. Organisational skills/ Social skills Oral Lang P.E.- Games and outdoor and adventure Fine and Gross Motor Dev. English: Communicating (Engagement and listening) Vis Art ; Creating art using the environment / Paint and colour *Gaeilge: Na Séasúr: An tearrach/ La le Bríde

Spring Song Children's review (led by Teacher) Adult group review (in school)	Music: Song Singing
WK 4 Opening /gratitude Risk Assess Boundaries SIT SPOT Adopt a tree - draw + photo in journal Blindfold Identification Tree Song Deer Stalk –nature bk Clove Hitch Lunch Diaries Children's review (led by Teacher) Adult group review (in school)	Curriculum Integration SESE: Sensory exploration and tree id Oral lang dev Vis Art: SPHE: Listening/ / Social skills Communication through gesture PE: Outdoor and Adventure CC: Environmental care and awareness/ My locality Music: Song Singing
WK 5 Opening/gratitude Risk Assess Boundaries Sit spot Practice Tools Make Shelters for woodland creature Lunch Write in diaries Children's review (led by Teacher) Adult group review(in school)	Curriculum Integration SESE: Designing and Making S.P.H.E. / Social skills Oral Lang P.E.- Games and outdoor and adventure Fine and Gross Motor Dev. English: Communicating (Engagement and listening) Vis Art ; Construction
WK 6 Parents Day Opening/gratitude Risk Assess Boundaries Parents Day SIT SPOT Mirror reflection Animal Names Parents Set up a shelter Lunch Diaries Children's review (led by Teacher) Adult group review (in school)	Curriculum Integration SESE: Designing and Making S.P.H.E./ C.C. : Myself and my Family/ Oral Lang P.E.- Games and outdoor and adventure Fine and Gross Motor Dev. English: Communicating (Engagement and listening)
WK 7 Opening /gratitude Risk Assess Boundaries Activity Mirror reflection	Curriculum Integration S.P.H.E./ C.C. : Designing and making Social skills PE: Balance and co -ordination SESE: Oral Language

Animal Names Talk and writing/ drawing about our experience of Forest Schools. Review Song of choice Children's review (led by Teacher) Adult group review (in school)	Literacy Music

Appendix W

FS Child Assessment Sheet (Pre and Post)

Please rate on a scale of 1-5 (1 being weakest and 5 being strongest) where you think each child is on each of these scales right now.

Name of Child	Self Esteem/ Self confidence	Social Skills	Motivation/ Concentration	Language / Communication	Physical & motor skills	Skills and knowledge	
						Literacy and Numeracy	SESE

Please indicate any particular concerns/SEN/things we should know about any of these children:

Form filled in by: class teacher

Appendix X

Teacher FS Observation and Assessment Schedule

Please fill in based on your observations during the session today. You can use the numbers no change (1) slight change (2), dramatic change (3)) or write freely.

	Self-Esteem Self - confidence	Social Skills	Motivation/ Concentration	Language Communication	Physical Motor skills	Skills and Knowledge
Wk 1	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Wk 2	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Wk 3	1 2 3	1 23	1 2 3	1 2 3	1 2 3	1 23
Wk 4	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Wk 5	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	12 3
Wk 6	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Wk 7	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Overall Review						

Appendix Y

FSL Risk Assessment and Review Schedule

FSL Risk assessment

Date	No of children No of adults	Place
Hazard Checklist	Checked	Action
Fallen branches/stumps etc		
Slippery areas		
Broken glass/ needles/cans		
Vandalism/ intruders		
Weather effects		
Fire Zone		
Tool Area		
Emergency Rucksack		
Equipment		
Spare clothes		
Other		
Comments		

FSL Review Schedule

Adults:

Date:

No of children:

Class:

Age:

Activities:
Any changes in behaviour from this activity?
How did they do?
General comments:
Participants:
Golden Moments:
Equipment:
Accidents/Incidents:
Sign: