*Toward a relational understanding of outdoor environmental education:*

*A case study of two residential learning settings in South Devon, UK.*

Submitted by Lewis Winks to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Human Geography, February 2018.

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Lewis Winks

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**Abstract**

This thesis examines the ways in which outdoor environmental education can be understood in the context of relational-environmental encounters. The study focuses on residential learning programmes with secondary school students in the UK. The research aims to explore the extent to which current educational practices, structures and pedagogies in two case study locations can be said to occur as continuous lived experiences; invoking relational ontologies. Furthermore, this research examines the environmental encounters of students and considers how these encounters shape and challenge environmental narratives consisting social and cultural norms. Making use of developments within behaviour change theory, ecological ethics and environmental pedagogy, this thesis brings together ways of understanding environmental and sustainability education, notions of relational ways of being, and models for transformative societal change. The research methodology makes use of ethnographic encounters in two case locations comprising residential education centers in South Devon, UK, chosen for their representation of instrumental and emancipatory pedagogies. Participating in fifteen outdoor environmental education programmes over ten months, participant observation, focus groups, interviews and photo elicitation were deployed. In-field and subsequent thematic analysis, using structured coding elicited four central themes: structure, choice, relationships and discomfort. These themes formed the core empirical analysis and enabled an exploration of relational practices occurring across the spectrum of contemporary environmental education. The research therefore provides a narrative of residential experiences in a subjective, emergent and reciprocal environment, whereby both *lived* and *learning* experiences provide space for instrumental and emancipatory learning. Consequently, contributions are made to geography and education in four key areas; firstly, the articulation of a pedagogy of discomfort deployed explicitly and implicitly within environmental education; secondly, an advancement of relational connotations of place-making within environmental education as being emergent of agency, structure and the setting itself; thirdly, through the ecotheraputic 'performance' of other-than-human material and ecological environments in education discourses; and finally, through an advancement of a blended approach to environmental education,

understood from an ecological-ethical, as well as a behavioural-practice perspective.

## Acknowledgements

Finally, thank you to my wonderful partner Harriet, who, as I write this is nursing our two-day old baby girl, Elizabeth. I am hugely grateful for your loving friendship and unwavering support.

Throughout the research process it has become clear that writing is far more than just *writing*. Producing this thesis entailed entanglement with the lives of others; both human and otherwise; people and place. Through the multiplicity of these relationships; their hopes, fears, intrinsic wonder and sensorial brilliance have been woven into the pages of this work. Work which has entailed evenings by firelight, nights spent under stars, and days by the ocean. It has wondered at the persistence of life at the return of spring, and longed for the crisp air of winter and the renewal it brings. It has slept on quarry ledges and travelled across the vastness of Assynt. It has ached to be home, and yearned to be away. This is written not lightly, as if to further support the relational aspirations and encounters of the work, but such that the research might take a step toward authenticity and in a sense dissolve into its own boundlessness. In acknowledging that writing this thesis has involved far more than sitting writing at a desk, I am grateful to the wider process of becoming that this work has enabled.

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Photo 7.8 "I think this is when my attitude changed in the woods because at the beginning I was I was really scared of insects and everything, but when we actually got hands-on and looked through the mud and everything…. When the spiders are actually in the pot, and I know that it's actually concealed I can look at them, and I would never

## Appendices

**List of accompanying material**

Winks, L. 2018. Discomfort in the field – the performance of non-human nature in fieldwork in South Devon. *Journal of Environmental Education,* DOI: 10.1080/00958964.2017.1417219

Winks, L. 2018. Discomfort, Challenge and Brave Spaces in Higher Education. *In:* LEAL FILHO, W. (ed.) *Implementing Sustainability in the Curriculum of Universities: Approaches, Methods and Projects.* Cham: Springer International Publishing. DOI: 10.1007/978-3-319-70281-0_7

Winks, L. 2018. Framing the Field: A photo essay examining residential fieldwork experiences of secondary school students at Slapton Ley in South Devon, UK. *Unpublished.*

Winks, L. 2016. The Hand Model: Its practical potential for guiding outdoor learning for sustainability. *Field Studies*.
Online: http://fsj.field-studies-council.org/media/2842631/fs2016-winks.pdf

Winks, L. 2015. Real World Learning: toward a differentiated framework for outdoor learning for sustainability. *Envigogika,* 10. DOI: 10.14712/18023061.492

# Chapter 1    Introduction

## 1.1 Context

### 1.1.1   The status of environmental education and outdoor learning in the UK

Environmental education in the UK represents a broad set of pedagogies and philosophies. Since initial development in the mid-20th century, environmental education has been joined by approaches such as sustainability education, education for sustainable development and citizenship education; each with their own sets of concerns for society and the natural environment. So too, outdoor learning, both as an aspect of the taught curriculum and as informal education has developed momentum in the UK in recent years – not least in the form of fieldwork, forest schools and outdoor adventure education (D'Amato and Krasny, 2011, Taniguchi et al., 2005, Knight, 2013, Foskett, 1997, GA, 2015) – despite historical declines in the sector (Amos and Reiss, 2012, Tilling, 2004). Recent changes to A-level the curriculum has seen compulsory fieldwork retained as an aspect of geography study (GA, 2017). In recognition, and in defence of environmental education and outdoor learning, the Field Studies Council (FSC) along with the Geographical Association (GA) promoted 2015-2016 as 'The Year of Fieldwork' (GA, 2015). Increasingly, environmental education is being understood in these holistic terms, and finds agreement with much of the rhetoric found within the Department for Farming and Rural Affairs (DEFRA) recently published '25 year plan for the environment' (Scott, 2018, DEFRA, 2018), while Damian Hinds, the 2018 incoming minister for education, used his first speech to promote 'soft-skills' (Mason, 2018).

From a less formal perspective, outdoor learning has a record of providing deeper and more meaningful learning experiences which transcend subject boundaries and enrich the lives and understanding of learners (Nicol, 2014, Beames et al., 2012). Additionally, residential environmental education programmes often take place over an extended period and thus provide opportunities for residential visits which are augmented with interactions and immersion into natural and social environments, and are notable for contributions to young people's physical and mental wellbeing (Kendall and Rodger, 2015, England, 2016). It has been noted that these experiences of 'metaphoric practice' offer the potential for groups to form values and norms, as well as their own notions of justice within a microcosm

of society (Woodhouse and Knapp, 2001, Rose and Cachelin, 2010). Therefore the lived experience of residential and outdoor learning beyond the traditional curriculum focus including personal social development and enhanced opportunities is often cited as a reason for their place within the UK school and university calendar (CLOtC, 2015, FSC, 2015b).

It is clear that while there is appetite for environmental education and various forms of sustainability education, these approaches remain marginalised and for the most part optional and extra-curricular additions to schooling and education in the UK. Environmental education occurring as part of the curriculum has been noted to observe an overall instrumental focus, making use of an advocacy-approach based on building understanding through the acquisition of knowledge (Jickling, 2003, Wals et al., 2008). Meanwhile, much environmental education and outdoor learning with a broader set of goals occur as a result of organisations set up specifically to further the objectives of this type of learning, such as the Duke of Edinburgh Award, and the John Muir Award in the UK.

The status of environmental education in the UK is set against a backdrop of global uncertainty, including political upheaval, multiple foci of social injustice, environmental degradation, climate change and mass ecological decline resulting from habitat loss. While these global issues present themselves as incentive for perusing environmental education, the coalescing of these numerous problems is resulting in what Selby has termed 'multiple crises syndrome' (Selby et al., 2015), and the emergence and greater prominence of these 'wicked problems' (Brown et al., 2010) clearly requires new ways of envisaging the role and approach of environmental education within the 21st Century (Wals, 2007a). People of all ages are now faced with and 'extinction of experience' through which estrangement from nature coupled with fewer opportunities to come into contact with it threaten the basis upon which we form relationships with the non-human world, and through which we find comfort, wellbeing and health, as well as building understanding of geo-ecological systems and process (Soga and Gaston, 2016, Harding, 2006).

Against this backdrop, it seems clear that the environmental education approaches of the last century need to be reconceptualised to approach these complex, interlinked and 'wicked' problems from new philosophical perspectives, making use of a wider experiential basis for considering the role of outdoor and

environmental education in preparing both educators and learners for a sustainable future. It has been noted that regardless of the educational approach chosen, sustainability education also needs to draw upon a wider experiential basis, invoking an education not only concerned with facts and knowledge but additionally enriched through emotional engagement and "imaginative and creative entanglement with the world" (Selby and Kagawa, 2015a p.278). The lived experience of field based learning is seen to be important, as learners become part of a community where opportunities to engage more meaningfully with the environment present themselves. So too, the ethical positions promoted by educators are seen to be important for the development of pluralistic views and critical thinking in learners (Cocks and Simpson, 2015, Jickling, 2003). Beyond the instrumental demands of the curriculum come calls for sustainability to become a 'frame of mind' for educators, enabled by a relational ethic which infuses the educational experience (Bonnett, 2002). It is argued that this type of deeper, intrinsic, ecocentric and emancipatory learning finds strong purchase within outdoor learning, as educators are already in the setting where this type of learning is most encouraged – the outdoors (Nicol, 2014).

### 1.1.2 Conceptual tensions

This thesis explores new philosophical positions as a way of navigating the conceptual tensions which exist within the field. While environmental education has provided a set of means and approaches for educating environmentally aware and empowered citizens for many decades; informed by early incarnations of the environmental movement, and later by global agendas focused more readily on sustainability and sustainable development, there has been disagreement regarding the philosophical underpinning and practical process through which to approach this education.

Environmental education, largely informed by instrumental and knowledge-driven methods for learning about environmental issues has spurred much debate concerning the approach to make use of, and the paradigm from which to operate (Hungerford and Volk, 1990, Jickling, 1992, Wals, 2011, Bonnett, 1999). In reaction to the perception of social and ecological crises, the developers of environmental education programmes have been quick to predefine their specifications and goals, without knowing what the education is supposed to prepare learners for (Orr, 2004). Many point out that the uncertainty surrounding

many of the problems which humanity faces cannot be met with such deterministic responses (Selby and Kagawa, 2014, Jickling and Sterling, 2017b). The tensions which exist within environmental and sustainability education largely emerge from disparity between these transmissive and transformative approaches; otherwise known as instrumental and emancipatory learning (Wals et al., 2008). Transmissive/instrumental approaches place value upon fact-based knowledge and skills, oriented toward outcomes and is largely objective. Importantly for sustainability education, instrumental approaches adhere to conceptions of known solutions to the multiple crises of unsustainability. Transformative/emancipatory approaches on the other hand concern themselves with conceptual understanding, are oriented toward process rather than product, and make use of pluralistic and subjective frameworks for understanding problems. From a transformative perspective, many answers exist to largely unknown questions surrounding sustainable futures (see: Sterling, 2001, Sterling, 2004b).

While these tensions sit largely underneath the surface of educational practice, they very much inform the approaches taken to teaching and learning about social and environmental issues. Emerging from philosophy and ethics, the discussion dovetails with educational practice, and engages too with the psychology of behaviour. This thesis situates itself amongst this tempestuous debate and engages with these allied and sympathetic areas of literature in order to purposefully identify opportunities to understand outdoor and environmental education occurring in residential settings from new perspectives.

### 1.1.3  Opportunities for research

This research examines the dualistic tension between instrumental and emancipatory learning paradigms, and seeks to understand the ways in which residential outdoor environmental education programmes operating on both ends of this spectrum occur as told through the experiences of students taking part in them. Specifically, the study seeks to find ways to move beyond this dualism and to find spaces within student experiences to understand residential learning from a relational ontological perspective. To fully articulate this approach and the experiences of students from this perspective, this research makes use of key areas of literature concerning; pedagogy and environmental education, psychology and behaviour change, and philosophy and environmental ethics.

Furthermore, a narrative is woven through the literature and empirical body of the work, making use of key theoretical devices emerging from these areas, to better articulate a relational ontology within outdoor environmental education. From a pedagogical position, a pragmatic and pluralistic vision presents itself as an opportunity to bring divergent educational paradigms into conversation with one another. Complementary to this, behaviour change psychology offers a social practices view in order to understand environmental education from a 'blended' perspective, whereby both structure and agency converge to place focus on the mediated practice of education. This position offers opportunities to move beyond the archetypal knowledge based approach of environmental education and toward a deliberative posture. Finally, environmental ethics presents frameworks for considering engagement within the environment differently. Namely, a possibility to understand environmental education from a relation-focused and ecocentric position emerges, within which the environment presents itself as animate and reciprocal. The key areas of literature, their associated theoretical devices, and the objectives of the research are presented together in figure 1.1.

## 1.2 Research aim and objectives

### 1.2.1 Aim

This study focuses specifically on outdoor and environmental learning in a residential context with secondary school students in the UK. The research aims to explore the extent to which current educational practices, structures and pedagogies in two case study locations can be said to occur as continuous lived experiences; invoking relational ontologies. Furthermore, the environmental encounters of students are considered, with specific focus upon how these encounters shape and challenge environmental narratives consisting social and cultural norms. Beyond the described and explored encounters of students, this research looks too at the possibilities for outdoor environmental education to turn to relational ethics in order to understand the role of broader experiential encounters in shaping learning for sustainability.

The objectives of this research thus emerge from the tensions and debates which exist within environmental education and sustainability education, and offers a possibility of bringing historically divergent positions into conversation with one another. This 'blended position' presents itself as an opportunity to understand residential experiences beyond the transmissive/transformative divide and

instead looks to the wider experiential basis which these places and experiences offer.

1) To *describe* the environmental encounters of students in residential outdoor environmental settings.

2) To *consider* the ways in which these encounters might challenge environmental narratives and social norms.

3a) To *explore* the extent to which student experiences of residential outdoor environmental education can be said to invoke relational ontologies.

3b) To *suggest* ways in which residential outdoor environmental education might become more responsive toward relational ontologies.
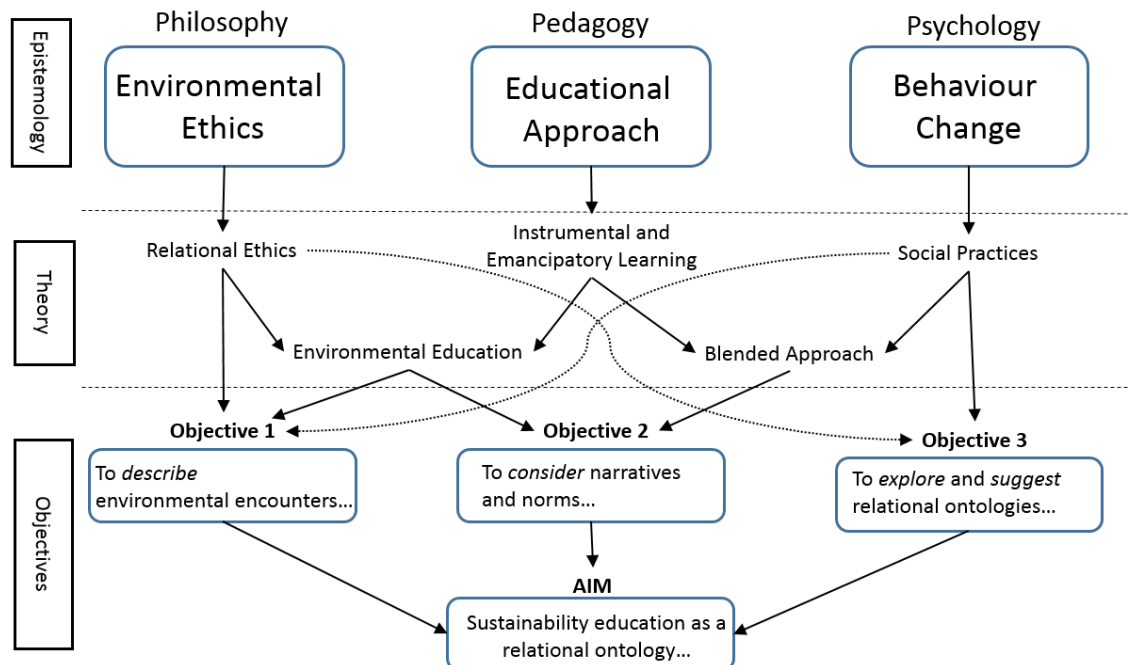


*Figure 1.1 Relationship between literature, theory and objectives.*

## 1.3 Research and approach

### 1.3.1 Personal motivation for undertaking this research

I have worked in environmental and outdoor education in the UK since 2009, more recently for the Field Studies Council at Slapton Ley in South Devon. My motivation for doing this work stems from a desire to connect theory with practice and to enhance my own understanding of the geographies of outdoor learning. Prior to enrolling on this PhD I became involved in European funded project, the 'Real World Learning Network' which focused on experiential learning and sustainability education, making use of a social-psychology values basis for

understanding the importance of ecological narratives. The output of the project was the so-called 'Hand Model' - seen to be a blend of instrumental and emancipatory approaches to sustainability education (Winks, 2015, RWLn, 2015). The Hand Model was trialled during teaching of programmes at Slapton Ley. As I made use of the model in practice, I became interested in the need for a greater understanding of student experiences of learning in the outdoors. In particular, I felt that there was more to learn about the implications of experiences of residential learning for learners relationship with the natural world. I felt that many courses which focus on assessment based learning were also contributing toward deeper ecological understandings implicitly, while those courses which sought to develop a relational sense of understanding with the natural world were also concealing alternative narratives concerning place and the identity of learning (see: Winks, 2015). Thus, I embarked upon the journey of PhD study.

Over the course of this PhD I have remained actively involved in delivery of outdoor environmental education courses, with secondary school aged children at both Slapton and Embercombe (second research setting – see section 1.3.2), as well as the delivery of teacher education courses with PGCE and BA education students from both Exeter and Plymouth Universities. I have sought throughout this process to connect theory with practice, and as such, the process has evolved as a reiterative one. My relationship with both research settings has grown, and as it has, I have felt enabled to contribute toward the efforts of these organisations. Indeed, as I near the end of my PhD I remain involved in the teaching on some of the programmes at both case settings – which I hope will continue beyond submission of this thesis. This work has in turn helped to inform me of the pedagogical approach and relationship with education which I would like to develop in myself. Thus, I feel that the PhD journey has been one of relationship and growth.

Anyone reading this will no doubt have questions concerning my positionality, and indeed this is something to which I have brought a great deal of attention. I cover the suggestion of impartiality and positionality as a defence of my approach in the methodology chapter. However, I wish to begin with a few words here to give the reader a flavour of my concerns and how I have attempted to both face and embrace them.

It is clear that I am not an impartial observer of the world of education. I would refute any claim that anyone could be – regardless of educational ideology and persuasion. However, rather than attempt to defend my approach to this research as a quest for the objective truth, instead I assert that a subjective and relational viewpoint is perhaps more valuable in this instance than a purely rational one. Rational perspectives on education are aplenty. They are prevailing and persistent. They are also thorough and demand the ear of many. However, throughout the course of reading for this thesis I realised that while much is known objectively about the value of being in the outdoors for physical and mental health, academic attainment as well as socially, little is said of the personal and nuanced experiences of being close to nature in the context of the 'outdoor classroom', or while on residential fieldtrips. For me, the subjective, and illusive personal stories of the field hold great value, both on their own as gateways through which we glimpse the way in which others perceive the world, but also as complementary ways of understanding the development of relational ways of being in the world. Making sense of a relational ecological ontology seemed only possible through the personal, subjective and relational lens.

However, I don't wish to demonstrate against the wealth of excellent research which has been done and continues to shed light on the role outdoor learning and environmental education has in shaping our communion with the earth. Rather, I think that there are many ways in which both research paradigms can complement one another. I hope that this work and the associated educational practice which goes with it enables a continuation of discussion regarding the importance of human experience in relation to the natural world, facilitated through outdoor environmental education.

### 1.3.2  Research Settings

Fieldwork carried out for this thesis took place at two locations, both of which are situated in South Devon, UK (see fig. 1.2). The first location was Slapton Ley Field Centre, in Start Bay on the South Devon coastline (see fig. 1.3), equidistant between Kingsbridge and Dartmouth in a region known as the South Hams. The field centre runs residential field courses for (mostly) secondary aged students from schools located all over England and Wales, with some international schools. Work at Slapton focuses predominantly on the national curriculum and associated specifications for biology and geography courses, and as such tends

to place focus upon exam requirements. The second location was Embercombe, in the Teign Valley just outside Exeter in mid-Devon (see fig. 1.3). Embercombe runs a series of programmes throughout the year focused on personal and societal change and sustainability, aiming to equip people of a variety of ages with the capacity to ask questions, think critically and ultimately 'change their world' for the better. Although Embercombe works with children and adults, my work was with the education team, focusing on programmes with 11-18 year olds – secondary school age. Most schools which visit Embercombe come from all over the UK. More can be found out about the locations as well as a justification for choosing them in chapter three. It should be noted that fieldwork at Slapton and Embercombe took place concurrently throughout 2016.



*Figure 1.2 Map showing location of the county of Devon, UK*

*Figure 1.3 Map showing location of case study sites, South Devon.*

### 1.3.3  Broad research strategy

Broadly, this work employs a qualitative research strategy, developing a theoretical analysis through subjective interpretation of data collected in the field. The data for this thesis was collected following 12 months of desk based research and took place throughout 2016 between February and December at the two case locations. In the field, multiple data collection techniques were deployed including; participant observation, interviews, focus groups and photo elicitation. These techniques were complemented with personal audio recordings, diary entries and subsequent reflections, with the purpose of creating a richness of data with which I lived for the duration of the work on this thesis, and as such aimed to create a sense of continuity between the work and my sense of self – further enhanced by my positionality as both researcher and educator in both settings. Upon completion of fieldwork, the analysis of data commenced. In the tradition of ethnography, the analysis was initially seen to have occurred in the field, with the writing down and writing up of field notes – normally twice each day. With the onset of desk based analysis, the process moved on to writing out -with the formation of a narrative style to some of the personal reflections, while transcription was necessary for audio recordings. Notably, all the focus groups had to be transcribed as well as selection of interviews. Further analysis included 5 levels of open coding and subsequent detailed arrangement of code structures.

Finally, the writing of empirical material brought the narrative together in the form of the four empirical chapters found in this thesis. For more detailed information on the research strategy and methodological approach taken in this work, the reader is referred to chapter three.

### 1.3.4 Epistemological position

As previously said, this research rests upon the basis of subjective and qualitative enquiry, and takes an interpretive rather than affirmative approach. There are broad traditions in educational research which exemplify constructivist rather than positivist approaches and as such, this work allies itself with those which have gone before. However, it is also noteworthy that this work takes an epistemological approach which is more tentative, for it also makes assertions regarding the nature of knowledge and experience which rely more wholeheartedly on post-materialist and animistic considerations and understandings. Recent debates in environmental education research and philosophy have cut a clear path to follow regarding the relational perspectives signposted by new materialisms and animisms which permit this work to make clear assertions regarding its contribution. Subjective and interpretive constructivism therefore make up the epistemological foundations of this work, resting on the bedrock of relational ontology and post-qualitative analysis.

## 1.4 Research contributions and empirical framework

### 1.4.1 Contributions to geography and education

This work provides detailed experiential insights into the field of outdoor and environmental educational practice, including residential learning experiences of students, from a relational perspective. Many quantitative and somewhat more rational studies have gone before, providing excellent empirical material celebrating, contrasting and contesting the value of outdoor and environmental education. This work does not intend to refute or subjugate these studies but instead provides a new narrative structure through which to understand the nuanced, and messy experiences of outdoor learning in residential settings. The hope of doing so is to provide a storied set of experiences which, alongside other work will guide further research, inspire educational practice and inform policy. In particular, this study seeks to better understand the ways in which outdoor learning as part of residential field visits provide a context for exploring narratives of connection and community through the performance of the non-human world;

making use of concepts familiar to geographers – community, structure and relationships to understand the ways in which education interacts with these concepts in outdoor learning settings. Specifically, the ways in which student choices operate in an environment outside normal school settings and how challenge and discomfort which arise from different forms of structure and associated choices give rise to new relational encounters with students' own social and cultural identity, their learning communities and the wider world.

This thesis makes contributions to the fields of education and geography in four core areas. Firstly, this work recognises that much has been achieved through approaches to transformative education and experiential learning in order to better understand how 'transformative moments' operate within outdoor and environmental education. Making use of recent work on discomfort and challenge, this thesis postulates that more might be achieved in the quest for sustainability education by understanding how transformative moments are constructed in conjunction with the non-human environment (both ecological and material) as well as through social and cultural interaction. The construction of new environmental narratives which enact intrinsic value positons and ecocentric understandings of human-nature relationships may stem from challenge to existing cultural and social norms.

Secondly, this thesis seeks to contribute to the ways in which the non-human world is understood within environmental education programmes, not only as a backdrop to learning, but as a collaborative and active contributor to student learning experiences. Borrowing from recent discussion on animism and new materialist philosophies, as well as ecotherapy approaches, the ecological and material world is seen to 'perform', and in this sense, transformative moments might be seen to occur through learning *with* nature and not just *within* it.

Thirdly, and wrapped up within both of the previous points, this thesis attempts to move beyond the already well-established belief that outdoor and residential learning are 'good' experiences from a social-relational point of view. While this is well established, alongside multiple other benefits, this study suggests that an ethical-relational foundation is also present within residential forms of outdoor learning, whereby social norms are challenged, and the rhythms of other ecological encounters create dissonance which might enable a fostering of a relational ethic within learner.

Finally, this thesis finds reason to prompt a blending of paradigms found within both approaches to behaviour change as well as education. From each tradition, human behaviour is seen to be shaped either instrumentally, or through free choice. Educators have argued that instrumental and emancipatory positions exist within sustainability education, creating tensions and difficulty in deciding the direction efforts should be placed when conceiving of how best to educate a citizenry fit for the purposes of these times. So too, behaviour change theorists have taken a behaviourist stance, often seeking to instrument alter the behaviour of individuals, while some see merit in offering greater choice in actions. Recent developments in conceptual discussions have suggested that in both disciplines, a blended middle ground might be available, enabling a move beyond what some educators have dubbed 'a stunted epistemology' (Selby and Kagawa, 2015b). Making sense of this so-called blended approach within educational settings as well as charting the possibilities of working with a blended view of sustainability education from a relational perspective offers further innovative ground for this thesis to explore.

## 1.5 Thesis structure

This thesis is structured in such a way that the reader is guided through an unfolding narrative and introduced to a variety of insights, obstacles, considerations and arguments which presented themselves to the author both in the field, and during subsequent writing up. It is, however, neither possible, nor permissible to withhold key aspects of this story which prove crucial to understanding the whole in the outset – as such, the thesis is organised in such a way to give the reader the 'tools of understanding' in the outset, and later introduce key components of theoretical argument closely coupled with empirical material. While much of the relevant literature are included in the second chapter, a number of more significant contributions are held back to be introduced in later pages of empirical chapters four to seven. The purpose of this is to enable the reader to accompany the author on the voyage of discovery which writing this thesis proved to be. Much of the literature discussed in chapter two covers that which is later embellished in the empirical chapters, yet the more detailed discussion of this material demonstrated its increasing importance throughout the research journey.

In the following chapter (chapter two), a broad literature review is presented in which the reader will learn of the undercurrents of discourse, theory and debate pertaining to environmental, outdoor and sustainability education in the UK. In this chapter, wider considerations of environmental ethics, behaviour change, sustainability and educational paradigms will be covered. Chapter three moves on to focus on the methodological approach taken by the research, including the choice of field locations, the appropriateness of techniques and details of subsequent analysis. This chapter also deals with the aforementioned questions of researcher positionality, subjectivity and epistemology. Chapters four to seven open the thesis into discussion on the empirical material collected throughout 2016 and are divided into substantive themes emerging from analysis: 'structure', exploring the norms and routines of lived experiences in residential learning settings – especially contrasted with school based and home experiences; 'choice', in which opportunities for considering experiences in each case location as instrumental and/or emancipatory are brought to the fore; 'relationships', focusing on expanding scales of relationship with the self, the group and the wider environment; and finally 'discomfort', which examines the variously difficult and uncomfortable moments of outdoor and environmental education as they occur in residential settings, and importantly, how these moments contribute toward sustainability as a relational ontology.

These chapters present empirical material in a narrative style with discussion alongside. Each chapter begins with a more detailed examination of relevant literature and concludes with a number of clear observational points for the reader to consider. In the final chapter (chapter eight), conclusions are reached concerning the empirical material. Specifically, the emerging observations from each chapter are discussed in detail. The material is considered in light of the research aim and objectives and conclusions are presented. This chapter also includes recommendations for outdoor environmental education practice as well as an evaluation of the research process.

# Chapter 2    Environmental education: Toward a relational ethic

## 2.1 Introduction

### 2.1.1    Context

Environmental and outdoor education have played significant roles in shaping the learning of many generations of children and adults in the UK since the 1970's. However, despite this, these approaches as well as allied manifestations including citizen education, sustainability education and Education for Sustainable Development (ESD), are far from harmonious. A number of issues present themselves; educators disagree regarding the most favoured approach to teaching about environmental issues, outdoor learning involves a wide range of pedagogies, and sustainability is anything but a clear goal with regards to appointing an appropriate curriculum for which to prepare learners for an uncertain future and to tackle issues of social and environmental injustice (Kopnina, 2015, Jickling and Sterling, 2017a).

Against this backdrop, this chapter will chart the progress of environmental and outdoor education initiatives and programmes in recent decades in the UK, and in doing so will consider the role of learning in unearthing new ways of living and understanding the world This chapter will not only consider pedagogy and curriculum, but will also discuss understandings relating to environmental ethics and behaviour. Understanding the relational significance of residential outdoor environmental education requires a deeper knowledge the purpose of education against the backdrop of a rapidly changing world. In order to consider relationships, other than the inter-personal on a human social level, this chapter will move beyond research conducted into the 'traditional' relationships which are fostered through residential learning, and delve also into the rich veins of discussion on the deeper conceptualisations of what it means to act and think 'relationally'.

In addition to the global (UN) and national (UK) agendas regarding environmental and sustainability education – both pedagogy and ethics, it is relevant that an understanding should be reached regarding the locational approach to environmental education. Outdoor learning necessarily carries with it a certain place-based precondition, yet it is far from clear what 'outdoor learning' is, and therefore this chapter will review the range of approaches, incarnations and locations in which outdoor learning takes place. Additionally,

the role of the so-called 'residential' will be explored in relation to outdoor learning, thus building a conceptual picture of what 'learning away' looks like and how is has been, is, and might be perceived by those for whom this work is relevant.

In line with the research aim and objectives, this chapter will chart the landscape of the associated areas of educational practice, environmental ethics and behaviour change, while seeking to ground the discussion within the overarching concern of sustainability. Aiming toward a relational understanding of environmental education within the context of sustainability and a broader epistemological basis for education, it is necessary to look to the historical underpinnings of environmental education and its relationship and associations with education for sustainable development and sustainability education.

### 2.1.2  Links with thesis objectives

This chapter sets the intellectual scene for exploring in detail each of the objectives of the thesis.

Objective one requires a comprehensive understanding of the expectations of environmental education programmes, and as such warrants an exploration and discussion of environmental education as it has been defined in the UK since the 1970s, as well as an overview of the broad aims of environmental education considering behaviourist intentions and instrumental understandings of the environment. Furthermore, this objective is given additional perspective by discussion of typologies of outdoor learning and the current situation of residential learning in the UK.

Objective two prompts a discussion focused on the construction, recognition and challenge to social norms and personal agency. This objective necessitates examination of the literature on behaviour change. Not only is this a wide field, it is also a highly contested area, and as such this chapter will frequently connect this area of literature with environmental education and its myriad objectives. Social norms and routines in this context also concern environmental ethics, which are considered in detail in order to contextualise the empirical material which follows in subsequent chapters.

Objective three, in both of its parts, also requires an understanding of environmental ethics – in particular those ethical debates which surround relational understandings concerning virtue and care ethics. The ethical landscape which underpins modern debates on relational ethics are explored and relational forms of knowing the world are discussed. The underpinning conversation relevant to objective three is also fused with literature relating to the purpose of education and the philosophical debates relevant to environmental education and outdoor learning.

The literature reviewed in this chapter is from incongruent and diverse backgrounds, yet also finds a great deal of resonance within itself. Three main literature groupings are present; the practice of environmental education, environmental ethics, and behaviour change. Within these areas of literature, a diversity of epistemologies are clear – environmental ethics concerns the domain of environmental philosophy while discussion on environmental education connect with educational philosophy as well as the more specific educational literature concerning practice and pragmatism. Behaviour change literature is perhaps the most diverse, attracting interaction with sociology, psychology and philosophy. The diverse roots of behaviour change and environmental ethics enable an interaction with educational philosophy and a merging of ideas, otherwise perceived to be disparate and unconnected. For example, educational philosophy has long grappled with the issue of certainty and pluralism, while environmental ethicists also concern themselves with this debate as well as the interlinking discussion on values within the natural world. Opportunities are therefore apparent to bridge these conceptual areas and to find novel ways of understanding the relational components of environmental education combined with environmental philosophy and the motivations of behaviour change, within a broad education system increasingly concerned with finding ways to educate for a sustainable future.

### 2.1.3  Chapter structure

The chapter is broadly structured under three main headings; the environmental, sustainability and behaviour change agenda within education; the places, spaces and status of outdoor learning, and environmental ethics and ontological thresholds in outdoor learning for sustainability. The overall purpose of this chapter is to provide a comprehensive review of the current

literature pertaining to this broad set of topic areas – through selective focus on applicable texts, authors and research, while simultaneously providing focus and rationale for the thesis which follows.

Beginning with the environmental and sustainability agenda within education, the first section of this chapter charts the contemporary histories of environmental education emerging from the UN during the second half of the twentieth century before going on to explore the more recent birth of sustainability education considering Education for Sustainable Development and the UN Sustainable Development Goals. In the final part of this section, the literature concerning behaviour change approaches is examined, with particular reference to approaches and considerations within environmental education programmes.

In the second section of this chapter, outdoor learning including fieldwork, direct experience and experiential learning are considered. Literature is discussed which provides an understanding of the current concern for outdoor learning as part of UK education, as well as the 'beyond school' aspects of curricula-focused fieldwork and extracurricular experimental learning. The role of the residential experience will be considered in this section, including a discussion on the role of fieldwork.

In the final section of this chapter, the focus turns to the philosophy of education where the purpose and moral concerns of environmental education are considered. Values, ethics and the preconditions for behaviour change are discussed alongside important debates concerning the pathways to sustainability through education. Ethical issues such as pluralism and virtue are brought to the fore in order to reposition the perceived misgivings and hopes attached to environmental and sustainability education today. Finally, this section turns to the main focus of this thesis – consideration of relational approaches to the ethical underpinnings of educational ontology.

The chapter ends with a conclusion in which the discussion is summarised. The summary offers the reader a consolidated vantage over the literature areas covered, while highlighting areas of concern and interest which dovetail with the aim of the study. Focus will be given in the conclusion on specific gaps and opportunities emerging from existing literature, providing

perspective on the substantive empirical chapters which follow. By the end of this chapter the reader will have a comprehensive understanding of the landscape of environmental education including the behaviour change intentions and approaches, outdoor learning and environmental ethics as it exists in relation to residential learning, while also gaining an appreciation of the relevance, need and opportunity that this research fulfils.

### 2.1.4  Conceptual framework

This chapter deals with a large amount of literature and a wide variety of academic disciplines in order to contextualise the research which follows. Three core observations prevail throughout the journey through the literature. Firstly, the literature relating to environmental education dovetails with behaviour change research. Environmental education, and other forms of education, referred to as 'sustainability education', 'education for sustainable development', 'citizenship education' and so forth, are concerned with finding ways to produce a citizenry who are able to navigate difficult and uncertain times. So too, it is apparent that behaviour change theorists are concerned with similar preoccupations, and thus, the two literature areas find themselves in dialogue.

Secondly, and linked to this first point, environmental educators have long be caught up in debates concerning the purpose of education, and are in disagreement regarding the nature of education for sustainability. Some argue for pluralism, while others are more instrumental in their desires. This philosophical divide between those who espouse an emancipatory approach and those who prefer behaviourist 'training' for sustainability find common ground in the debates surrounding behaviour change. At this intersection, which is clearly rich for exploration, we find recent developments in blended approaches within both education and behaviour change, which are attempting to bridge this philosophical divide.

The third key observation made within this chapter relates to environmental philosophy and ethics. Ethicists have long discussed various value positions relating to the environment and many argue for a move away from instrumental valuation of environmental resources toward an infusing of intrinsic valuation into public policy, education and conservation practice. Remaining largely in the domain of philosophy, the debate is often curtailed

by a difficulty in practicing intrinsic value-led decision making. Environmental educators have become interested in the so-called ecocentric thinkers and positions of intrinsic environmental philosophy, and some key thinkers such as the land ethicist Aldo Leopold and Arne Naess of the deep ecology movement, have provided opportunities for infusing practicable ecocentric ethics into education. Recent literature has connected these philosophical positions with transformative moments in environmental education. This connection provides a rich basis for exploration of transformative learning in conjunction with the natural world.

The fourth and final observation provided by this chapter brings the main attention of the thesis into focus. Taking leave of the environmental ethical debates surrounding instrumental and intrinsic valuation of nature, an increasingly restorative subtext is emerging within environmental thinking. Moving beyond the deontological and consequential moral ground occupied for many centuries, some theorists are promoting forms of virtue ethics such as care, as well as ecological ethics, as possibilities for moving beyond 'stunted epistemological positions' and toward an ethical understanding with relationships at their centre. A so-called relational set of ethics is promising for exploration as it enables educators to bring in debates from within environmental ethics and geography, such as animism and new materialisms, and moves understandings of relationships within outdoor learning beyond those which are simply 'social' toward a wider sense of 'relational'. This position provides important and fertile ground for explorations of how environmental education might become more responsive to sustainability as a 'frame of mind', as well as connecting together the initially disparate positons of instrumental and emancipatory approaches to learning in the outdoors. From this situation, the performance and curation of learning experiences by the other-than-human world, both ecological and material, provide exciting prospects for understanding residential outdoor environmental education from a relational-ethical perspective.

## 2.2 The environmental, sustainability and behaviour change agenda within education

As a precursor to a discussion around sustainability and education, it is important to consider the historical underpinnings of the environmental

education movement. As will be shown later in this section, whether the current context of education for sustainable development sits within, alongside or separate to the context of environmental education, is a matter of debate. What is clear is that an environmental education movement existed in the UK before discourses on sustainability or sustainable development. This section will explore the origins and practices of environmental education, and will attempt to move beyond the descriptive to locate the narrative, discussions, and theories which find themselves in current educational debate.

Beginning with the historical context of environmental education in the UK, the first section will explore the politics and cultures which gave rise to and educational concern for the environment in the 20th Century. In the second section, the later conception of sustainability and the associated 'Education for Sustainable Development' (ESD) is discussed. Initially, this section acknowledges the mainstream position of ESD and sustainability education before giving space to consider the more critical debates and voices which have arisen in response. Finally, the third section brings into focus the explicit goals of ESD, EE and SE to inform, influence and ultimately change learner behaviour and that of society. Within this final section, the sociological and psychological basis for various behaviour change initiatives will be explored.

### 2.2.1 Historical underpinnings of modern Environmental Education in the UK

Although it would be possible to look further back than the twentieth century, particularly with reference to the European 'Nature Study' movement of the 18th and 19th Centuries inspired by thinkers such as Rousseau (Rousseau and Foxley, 1911), the modern UK Environmental Education (EE) agenda can be said to have become established during the political and cultural upheavals of the 1960's and 1970's. The conscious effort in education, in both the US and the UK,  to provide a reconnection with the natural environment is related to the rapid urbanisation of the 19th century (Stapp, 1969, Knight, 2013), reinforced by a post-war production surge which fuelled economic growth and increased levels of consumption (Huckle, 1991, McNeill, 2000). In 1962 Rachel Carson wrote 'Silent Spring' and helped to stir the public's

environmental consciousness. The desire for an awareness of 'environment' which EE embraced was grounded in the acknowledgement that environmental knowledge and understanding was being rapidly lost within an increasingly urbanised society.

Stapp (1969 p. 34) defines the EE movement as an education which "is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to solve these problems, and motivated to work toward their solution". With relation to the biophysical environment, Stapp is careful to state that this includes both human and nonhuman components, as well as their interactions – such as use of natural resources within the human environment, and the relationship between natural well-being and societal sustainability. The work of Stapp was later to be used as a cornerstone of the official ratification of environmental education in the form of the Belgrade charter (1975), and the Tbilisi declaration (1977).

According to Tilbury (1995 p.196), rather than a distinct concept, EE consisted of multiple set of approaches which "use the environment as a vehicle for teaching". The movements which made use of this approach in the UK included; environmental studies, outdoor education, conservation and urban studies (Tilbury, 1995), while others turned their attention to citizen education, democratic and minority rights (Huckle, 1991, Banks, 1997, Westheimer and Kahne, 2004, Darling-Hammond, 1996). Although diverse, each of these movements embodied the ethos of environmental education. In practice, environmental education meant approaching education as a means for fostering a set of responsible environmental behaviours (Hungerford and Volk, 1990). However, up until the 1970's there was no single banner under which EE existed. Instead, the movement existed of multiple foci and interests.

In 1972 the UN conference on the Human Environment was held in Stockholm, and vowed to support the emergent field of EE, and thus contain it under a single unified approach. To do this, the International Environmental Education Programme (IEEP) was created to oversee the implementation and funding of EE programmes globally. The process continued to gather momentum throughout the decade, with the building blocks of EE being laid

down in the Belgrade charter in 1975, and later ratified in the Tbilisi declaration in 1977.

The Tbilisi conference produced a set of objectives which consisted of; building awareness, developing sensitivity through experience, acquiring attitudes, values and feelings of concern, acquiring skills and providing opportunities to be involved with the environment and its associated problems (UNESCO, 1977). Hungerford (1990 p. 258) observes that these objectives can also be seen as ideal qualities of the environmental citizen, which demands that educators go "beyond basic education in its traditional sense", but concedes that "there is no one best way to implement these components in an instructional setting". Tilbury (1995) points out that the set of movements which made up EE during the 1970's and 1980's were typically 'apolitical, naturalist and scientific' in their approach (p.195). It is notable that EE is still seen today to be typically defined by such an approach, despite attempts to deepen its resolve, and recognitions that acquisition of knowledge does little on its own to change attitudes and behaviours. This will be explored further in section 2.2.3, but it is worth noting here that echoes of inconsistency and tension found in environmental education approaches and paradigms today, which part inform the focus of this thesis, find their roots in the mid-twentieth century.

McKeown and Hopkins (2003) have noted that the environment attracted heightened consideration throughout the process of ratification, although the declaration does repeatedly call for an interdependence of natural and manmade environments and for 'solidarity among all mankind'. As McKeown and Hopkins (2003) recognise, "this spirit of environmental protection and concern about resource utilisation and management [represented]… the widespread environmental concerns of the time" (p.118). However, a shift which had begun to occur at the beginning of the ratification process of EE in 1972 had become crystallised in the Tbilisi Declaration – that of the integration of development and environmentalism:

> *[The Stockholm conference] urgently calls for new strategies [for education], incorporated into development, which particularly in the developing countries is a prerequisite for such improvements.*
>
> *(UNESCO, 1978)*

As the concern for environmental issues grew in society, EE gained a prominent place in schools. Tilbury (1995) notes how EE responded to this challenge by adopting an interdisciplinary, broad, and global approach within formal education. Indeed, EE has positioned itself such as to transcend traditional subject boundaries and to be applicable to all school based subjects. The (UK) National Association for Environmental Education (NAEE) sees EE as a way to 'enhance all subjects', and suggests this is practiced "*through* learning outside the classroom, *about* the whole curriculum, [and] *for* a sustainable future" (Fellows, 2015 online). Rather than providing a challenge to the current curriculum content, therefore, EE positions itself instead to enhance and expand upon subject matter currently taught.

Taking a rather more critical perspective, Orr (2004) argues that 'all education is environmental education' and what really matters is what is actually taught as a part of that process of learning – "by what is included or excluded, students are taught that they are part of or apart from the natural world" (Orr, 2004 p.12). It is therefore relevant to understand what the motivations are for including or excluding subject matter from the remit of education more broadly and EE specifically, as well the multitude of experiences which can be had in a variety of settings and under a range of approaches. As EE grew in recognition as a concept, and in practicable terms, the global agenda began to shift throughout the 1980s and 1990s. Economic upheavals and political shifts marked a paradigm change which reshaped the educational landscape. New ideas and conceptualisations of the purpose of education emerged from these changes, and EE was seen as fertile ground for bringing the new environmental agenda into being through the mechanism of Education for Sustainable Development (ESD) – the identity of which is explored next.

### 2.2.2 The emergence and identity of Education for Sustainable Development

The initial momentum behind the distinctive and diverse elements of EE movements in the UK, as well as the centralised UN approach adopted in the late 1970's, was predominantly driven by a fundamental concern for the natural environment, linked to human agency and unsustainable practices. This reflected the growing concern throughout the earlier part of the second half of the 20th century for the environment, and the developing environmental movement in the UK. Supporting these concerns, the Club of Rome released

their publication 'Limits to Growth' (1972), advocating "a condition of economic and ecological stability that is sustainable far into the future" (p.23). This was the first wide scale use of the term 'sustainable' in this context (previously regarded from an ecological perspective).

As Huckle (1991) documents, the political and economic agendas of the 1980's began to take on new forms which placed a renewed focus upon growth and economic development. The conflicts with maturing environmental movements were obvious, as global development threatened the welfare of people and the environment (McNeill, 2000). It seemed impossible to reconcile these conflicting priorities, and it was amongst this confusion and despair that 'sustainability' was revisited and "adopted as a mediating term to bridge the ideological and political differences between the environment and development lobbies" (Huckle, 1991 p.33).

In 1987, The World Commission on Environment and Development (WCED) published the report entitled 'Our Common Future' (often referred to as 'The Brundtland Report') which placed sustainability firmly within a development context as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987). However, uncertainty about the merger existed in its early days, particularly regarding how the newly conceived concept of sustainable development would be understood by different groups, as Huckle (1991) explains;

> *"Interests aligned with conventional development use [sustainable development] to assist and justify their restructuring of the nature and conditions of production, while environmentalists use it to promote alternatives"* (p.45).

For education, the amalgamation of sustainability and development acknowledged the posture of the Tbilisi Declaration one decade before, but many voiced concern over the confused nature of the WCED document including David Orr (1992), who saw sustainable development as a term which 'conceals as much as it reveals', due to its multiple uses and interpretations. Orr saw the debate around sustainability as polarised between two extreme interpretations; that of the Technocrat and that of the Ecologist;

the first where resource depletion and ecological devastation would be solved by development and technology, and the second where ecological limits are the foremost limits to development, and where 'to develop' means to "restore civic virtue, a high degree of ecological literacy, and ecological competence throughout the population" (pg. 31). Blewitt (2014) also acknowledges such disparities and characterises them in terms of deep and shallow, or dark and light green ecological approaches and philosophies of sustainability. These distinctions are enlarged further in section 2.4, and can be found illustrated in figure 2.7.

Two decades after the global ratification and support of EE, and amid the new discussion about sustainable development, came the UN conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. It was at this conference that nations' participants agreed to build sustainable development into their curricula, which became known as Education for Sustainable Development (ESD). One of the key outcomes of the Rio conference was the agreement of *Agenda 21,* the apparent blueprint for rolling out Sustainable Development globally. Chapter 36 of this document outlines the process by which ESD would be built into the curriculum, through three main approaches; the reorientation of education towards sustainable development, increasing public awareness and the promotion of training. For many working in education, Agenda 21 was an exciting opportunity and allowed the regional flexibility and broadness of approach that was needed – captured by Conca and Dabelko (2015) as "the high water mark for diplomatic approaches to global environmental rescue" (p7). Although greatly varied in understanding and application, the ESD component of EE can be said to represent the mainstream environmental approach to education globally. This global concept of environmental education embodies a refreshed and updated focus upon sustainability. Initially termed (in the wake of the Rio conference (1992) and Agenda 21 report) Education for Sustainability (EFS), or Environmental Education for Sustainability (EEFS), the concepts encompassed a range of views and ideologies of how 'sustainability' should be achieved, and what role education should play. Early representations of the concept of sustainability within education as reviewed by Tilbury (1995) suggest that EEFS should be; relevant, holistic, values orientated, issue-

based, action orientated, and critical. Tilbury comments that the new focus on sustainability builds upon EE, not only by adding the above principles, but by developing and broadening EE's focus to include socio-economic and political aspects of environmentalisms. Because of the new focus of environment, society and economy, the term Education for Sustainable Development followed in popular usage by the mid-1990's. Mc Keown and Hopkins (2003) note that there had been a "core shift of intent…from environmental protection and pollution, to addressing the needs of both environment and society" (p.119), which throughout the last part of the 20th Century became embodied in the term Sustainable Development, and its educational offshoot, ESD.

Many voices have been raised in response to the sustainability agenda in education. Jickling (2017) observes that in the wake of the decade of ESD, which ended in 2013, a political vacuum emerged which offered a chance to re-establish the significance of educating for a 'sustainable' future. Navigating through the maze which had been laid out by decades of postulating about the nature of learning in relation to turbulent and uncertain times, Jickling and Wals (2012) point out that the sustainable development goals hold at their heart a paradox – the goals themselves are objective and facilitate a pedagogical approach which is instrumentally geared toward known outcomes, while the nature of our educating must prepare learners for uncertainty. This sentiment is widely shared in contemporary debates on the nature of sustainability education (Selby and Kagawa, 2015b, Wals, 2011, Wals, 2007a, Jickling and Wals, 2012). Navigating this challenge remains a contentious and important challenge for education today and forms a key basis for exploration within this thesis.

The emergence of ESD from the efforts and achievements of EE triggered debate about what exactly ESD is and where it exists in relation to the practice of EE. Indeed, ESD has been said to be a 'contestable' idea, as there is no one definition or conception of its meaning (Jickling and Wals, 2008a). The many meanings of ESD are often articulated by establishing them along a continuum between instrumental and intrinsic values; or instructive / transmissive and constructive / informative (see: Table 2.1).

| Transmissive / Instructive | Transformative / Constructive |
| --- | --- |
| Instrumental | Instrumental / Intrinsic |
| Training | Education |
| Teaching | Learning (iterative) |
| Communication (of 'message') | Construction of meaning |
| Interested in behavioural change | Interested in mutual transformation |
| Information – 'one size fits all' | Local and/or appropriate knowledge important |
| Control kept at centre | Local ownership |
| First order change | First *and* second order change |
| Product orientated | Process orientated |
| 'Problem – solving' – time bound | 'Problem – reframing' and iterative change |
| Rigid | Responsive and dynamic |
| Factual knowledge and skills | Conceptual understanding and capacity building |

From Sterling (2001)

*Table 2.1 Educational paradigms and perspectives (Sterling, 2001)*

It is important to recognise that while multiple understandings and meanings exist in relation to ESD, there remains a need to retain an overview of ESD as a representation of a mainstream drive for behaviour change within education, aligning itself with sustainability and sustainable development discourse in all their guises. Therefore, it becomes pertinent to work with definitions and meanings of ESD as an overarching concept which contains multiple meanings and perspectives to allow ourselves to work with the concept, despite its disputed ground.

ESD has steadily begun to enter mainstream teaching following the Rio summit in 1992, and work has continued through 10-yearly summits to enhance and embed ESD into teaching and learning approaches. Although progress has been regarded by many as slow, Sterling (2004a), in recognition of the ground that has been covered and the transformations that have occurred, states:

*"In the 30-year period from 1972-2002, we move[d] from a limited conception of the nature and role of environmental education, through a period of conceptual expansion and logical alliance with parallel 'education for change' movements, to a call for the reorientation of education as a*

*whole in the context of, and in the pursuit of, sustainable development" (p. 55).*

Following the relative success of the new agenda for sustainable/environmental education in the form of ESD, the concept remained marginalised. This concern led to the subsequent declaration of a decade of ESD which began in 2004, aiming to "allow every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future" (UNESCO, 2015), and looked to achieve this through the inclusion of topics relating to sustainable development within taught curriculums, but also by challenging educators to adopt "participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action...[and to promote]…competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way" (UNESCO, 2015). UNESCO makes it clear that the implementation of such goals should be nationally and locally specific, and highlight the importance of cultural and social differences; indeed, the UK has developed its own framework (UNESCO, 2010). The decade for ESD and its associated goals is seen as an opportunity for educational change and has set this aspiration at the global level (Jickling and Wals, 2008b). However, the logics and discourses which govern meaning behind ESD are still contested and more widely debated than the global unified approach by UNESCO suggests.

The resultant fall out from dissatisfaction and disagreement regarding sustainability education in the wake of the decade of ESD has led some scholars to revisit the notion of learning for sustainability in recent years. From its early conception as an aspect of environmental education, ESD and sustainability education more generally have been concerned with bringing learners into communion with the world – in fostering a care and concern for environment and society. It is not surprising therefore, that in the midst of goals and targets set at international level, educators are returning to this root to search for epistemological basis upon which this type of learning can subscribe to. Many educators are now suggesting the need to develop transformative learning experiences, and thus often turn to the natural world and the pedagogical basis of outdoor learning for doing so. The sensorial and visceral interactions which mark many transformative learning experiences

within the natural world have in particular been drawn attention to (Jickling and Sterling, 2017a, Soga and Gaston, 2016, Selby and Kagawa, 2015a, Huckle and Wals, 2015, Wals, 2011, Wals, 2010c, Wals, 2010b). This new 'critical and transformative' agenda for sustainability education is set against a backdrop of worsening environmental crises, or wicked problems (Brown et al., 2010) as well as a growing loss of affinity with the natural world, termed an 'extinction of experience' (Soga and Gaston, 2016). The sense that humans are not only contributing to the state of the natural world, but at the same time are increasingly estranged from it, has developed an increased desire in the education community to explore relational-pedagogical opportunities within outdoor learning.

The next section turns to the concurrent developments within the allied field of behaviour change – for much of what is termed transformative learning, learning for sustainability or environmental education is concerned with influencing individuals, and society's behaviours. Bringing together understandings of the history of environmental education and sustainability related education initiatives with behaviour change literature provides a strong basis for consideration of the objectives of this thesis. Not least, understanding the environmental encounters and interactions of students is unavoidably anticipated from the perspective of the values and intentions of environmental education programmes, many of which are infused with longstanding behaviouristic approaches.

### 2.2.3 Behaviour change, values and sustainability education

Education, whether under the heading of Environmental Education, Education for Sustainable Development, Sustainability Education or any similar term, has often been regarded as a mechanism of altering individual's and society's behaviour. In recent decades the gaze has fallen upon the possibility of changing behaviour in accordance with the environmental agenda – indeed, the original explicit goals of EE were to produce environmentally aware and sensitive citizens, with the skills, attitudes and ability to participate (UNESCO, 1977). This in turn has led to use of 'traditional' rationalist theories of behavioural change which advocate a causal knowledge-awareness-behaviour (K-A-B) basis for changing learner's behaviour. This entails educating *about* the environment, making use of instrumental knowledge and

becoming aware of environmental problems, and purposefully engaging in changed behaviour as a result (Hungerford and Volk, 1990). Although largely unproven by empirical analysis, this method appears to remain favoured in EE and ESD programmes today (Jickling, 2003, Wals, 2011, Jickling and Wals, 2012), with UNESCO stating that "ESD allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future" (UNESCO, 2015). Some scholars have pointed out that learning *for* sustainability is not the same as learning *as* sustainability which invokes an experimental, experiential and transformative process, recognising the difficulty of learning *for* something which exhibits unknown qualities - such as sustainability (Sterling, 2010, Sterling, 2001). Huckle and Wals (2015) suggest that ESD has thus far been unsuccessful in appropriately challenging a 'business as usual' agenda, and exhibits largely reformist ambitions which fail to bring into critical discussion the alternative forms of governance and relations which might give sustainable behaviours the space to flourish.

The discourses focusing upon the way in which education may contribute to a sustainable future borrows in large part from the preceding discussion on education paradigms and approaches. Echoed in the wider debate, the positions of emancipatory and instrumental approaches to education reflect the positions of those wishing to see educators challenge and become critical of embedded practices and to transform social and environmental relations, and those who believe that the system is adequate and adheres to a reformist and structural adjustment approach. Just as education is turned to as an important vector by which sustainability might be realised, many have been critical of education's ability to contribute to the crisis of unsustainability. Orr (2004) makes the observation that much of the ecological and social crises which we face are the consequence of decisions and actions made by some of the most highly 'educated' people from some of the most prestigious institutions, a sentiment similar in vein to Dewey (1938) who observed that not all experiences are equally educative. Nicol (2014) stresses that experiential learning has a transformative social purpose "not just to learn to live within the status quo… to engage with society not simply to understand it but to change it" (p.456). It seems from these observations that much more is expected from

EE and ESD programmes than simply raising awareness and providing instrumental knowledge of the environment and its associated issues.

Alongside the educational discourses on the purpose of education in relation to forwarding the sustainability agenda, the prominent work of psychologists contributes to our understanding of what makes an effective educational experience which challenges and changes learners' beliefs, attitudes and values in relation to the environmental and which steps beyond the simplistic and ineffective K-A-B model of traditional EE practice. Although environmental understanding and awareness may increase as a result of a knowledge (or learning *for*) driven educational strategy, the likelihood of behaviours changing as a result is slim (Hungerford and Volk, 1990), however, this doesn't necessarily make the role of knowledge insignificant in a behaviour change process. Ajzen's (1991) theory of planned behaviour (TPB) suggests that knowledge plays a critical role in allowing learners to evaluate their potential behaviours – and hence their attitudes towards acting. Additionally, it is postulated by Ajzen that other contributing factors alongside attitudes important for informing behaviour are; subjective norms, referring to the social-cultural pressure to preform (or not) a particular action, as well as a perceived behavioural control which refers to the implication of obstacles to performing an action – including resources available, opportunities, institutional support etc. (Ajzen, 1991). These factors when taken together inform an intention to act, and therefore a behavioural outcome. In terms of the importance of TPB for this research and EE more generally, it is possible still to see the significance of knowledge in informing the leaner of the consequences of their actions, but alongside an emphasis on instrumental learning, the educational process much become aware of the social norms at play – upon the individual or group (considering their cultural and social background), but also of the setting in which learning is taking place (i.e. what are the social norms and rules of conduct of residential field centres, or outdoor / community settings). This hints at an interaction between structure (institution and governance) and agency (individual) in the determination of behaviour (Barr, 2004). So too, aspects of lived experience occurring during residential fieldtrips – considered in section 2.3.2 – can be seen to enact their own social and cultural norms. Understanding how these norms are

challenged, shaped and created in these settings underpins objective two of this thesis.

Hungerford and Volk (1990) proposed that although instrumental knowledge remains an important element, it is applied within a three-stage process which includes several other variables (see figure 2.1). The first, labelled 'entry level variables', promote environmental sensitivity– defined as an 'empathetic perspective toward the environment' (p.261). This then leads to 'ownership variables' which add a personal dimension to environmental issues – aiming to promote environmental behaviour by 'owning' the issues at hand. It is proposed that this is achieved by obtaining crucial in-depth knowledge of specific issues – to understand them, as well as a degree of motivation which stems from a personal interest. Finally, the process leads to empowerment, which involves an awareness of how to apply knowledge and skills, the intention and capacity to act, and a belief in the worth of those actions.

| Entry-Level Variables | Ownership Variables | Empowerment Variables |
|---|---|---|
| **Major Variable**<br>Environmental Sensitivity<br><br>**Minor Variables**<br>Knowledge of ecology<br>Androgyny<br>Attitudes toward pollution, technology, and economics | **Major Variables**<br>In-depth knowledge about issues<br>Perosnal Investment in issues and environment<br>**Minor Variables**<br>Knowledge of the consequences of behaviour - both positive and negative<br>A personal commitment to issues resolution | **Major Variables**<br>Knowledge of and skill in using environmental action strategies<br>Locus of control (expectancy of reinforcement)<br>Intention to act<br>**Minor Variables**<br>In-depth knowledge about issues |

*Figure 2.1. Environmental Behaviour Model (Source: Hungerford and Volk, 1990)*

Additionally, the role of values in promoting environmental behaviours has received attention, in large part from social psychologists. Stern put forward a Value-belief-Norm (VBN) theory, within which the promotion of altruistic values (Schwartz, 2012) affect the beliefs of the consequences and effectiveness of a particular behaviour, as well as the environmental outlook – quantified using the New Ecological Paradigm (NEP) scale (Dunlap et al., 2000) – returned to later in chapter 3. This causal process influences personal norms and manifests in pro-environmental behaviour which are divided into

four main typologies depending upon the situation of the individual (see figure 2.2).
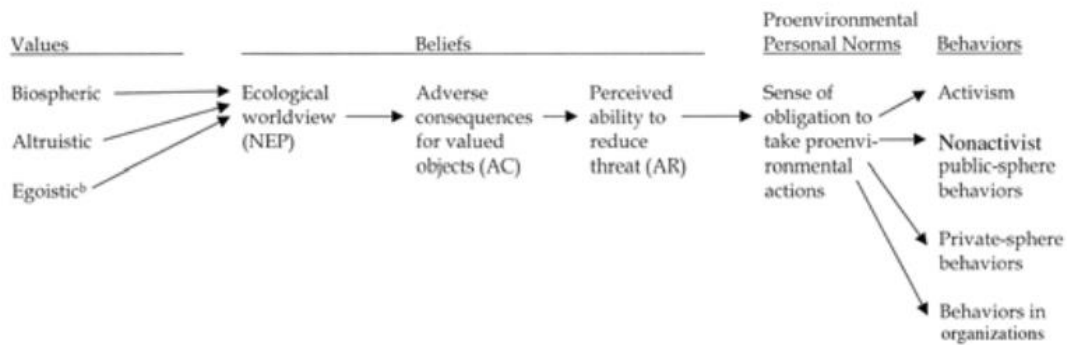


*Figure 2.2: Value-Belief-Norm Theory (source: Stern, 1999)*

By placing emphasis upon values at the beginning of the process, the VBN theory suggests that understanding and developing the learner's worldview, as influenced by their values, might be the starting point for an EE approach to changing and influencing behaviours. In many ways, this suggests that a deeper and more significant shift may need to occur before environmentally significant behaviours can take place, echoing McShane's suggestion that 'norms for action' should be precluded by 'norms for feeling', whereby an intent for action is informed by intrinsic or [to use Stern's language] altruistic values (McShane, 2007). The assertion that altruistic or ecocentric value leads to pro-environmental behaviour has repeated and tested particularly in the field of sustainable consumption (Stern et al., 1999, Gilg et al., 2005, Thompson and Barton, 1994), but also within environmental education (Orams, 1997, Kopnina, 2013, Kollmuss and Agyeman, 2002). To this end, there has also been a growing interest in assessing learners' environmental value positions (Schultz, 2001, Dutcher et al., 2007), attitudes (Dunlap and Van Liere, 1978, Dunlap et al., 2000) and ecological worldviews (Kopnina, 2014). Environmental values will be explored in greater depth in section 2.4 of this chapter.
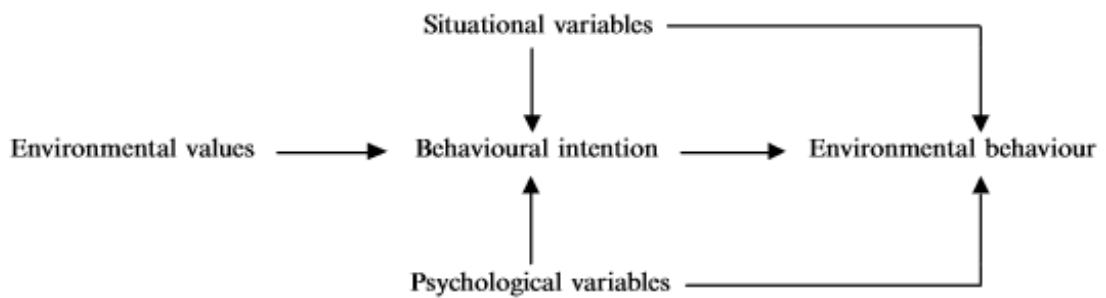
*Figure 2.3: Framework of Environmental Behaviour (source Barr et al., 2001)*

Barr et al. (2001) suggest that behavioural intention and environmental behaviour is the result of a combination of environmental values, situational (socio-demographic) and psychological variables which combine to influence behavioural intention and behaviour (see figure 2.3). Gilg et al (2005) examine the role of these variables for influencing environmental attitudes and behaviour. Findings suggest that socio-demographics play a key role in establishing and embedding norms for action, with behaviours associated with specific groups. Additionally, it is noted that belief in the effectiveness of an action or behaviour is a key enabler in the behaviour change process. These other variables situated between principles for acting, and actioned behaviours help to develop insights into the so-called 'value-action gap' which has been criticised as a shortcoming of previous behavioural models (Blake, 1999). It is notable that the framework applied in this case is less rigid and more flexible than the model approaches which have been previously examined, and presents an alternate view of behaviours mediated by situational characteristics and personal attributes, therefore removing the individual as the exclusive conveyor of behavioural intention (Barr, 2008).

There has been a recent surge of interest in EE for making more extensive use of the work on behaviour change. Recognising a combination of enabling principles and barriers to promoting pro-environmental behaviour within educational programmes, Kollumuss and Agyman (2002) propose  model which brings together a range of identified mediating behavioural factors, but places them in 'internal' and 'external' groupings, stating that strategies to change behaviour are most effective when both sets of factors act together. Such psychological models have been made use of by Common Cause (PIRC, 2015, PIRC, 2011) for guiding the work of organisations and

individuals wishing to develop pro-environmental behaviours, including education and more recently using social marketing strategies (Crompton and Weinstein, 2015). Using Schwartz's value theory, the Real World Learning network (RWLn, 2015) have developed an integrated model which builds upon previous behavioural models including Hungerford and Volk (1990) and Stern (2000), but more explicitly works with pro-environmental values and learner empowerment to promote experiential and experimental outdoor learning experiences (RWL, 2015, Winks, 2015). The interest in this type of social-psychology approach to attitudes and behaviour, and its recent deployment in the field of education, represents a fixed and instrumental approach to behaviour change as represented through linear cause and effect models.

Interest in making use of new approaches to developing competencies for sustainability is also developing under the heading of transformative and social learning (Sterling, 2010, Sterling, 2004a, Wals, 2007b). Many of these strategies borrow from the work of behaviour change theorists in terms of seeking affective and value driven approaches to developing sensitivity to the subject of learning (Stern et al., 1999, Kollmuss and Agyeman, 2002), but operate from an emancipatory learning perspective and thus engender conflict between behaviourist and constructivist educational positions, otherwise presented as 'information-intensive' and 'deliberative' approaches to behaviour change (Barr, 2008). As suggested in section 2.2.2, this is problematic and raises questions about the nature of education and the direction of its drive toward sustainable behaviours. It is observed by some critical scholars to be at odds with the democratic ethos of education to pursue instrumental and goal-driven learning (Bonnett, 2013, Sterling, 2001, Jensen and Schnack, 1997). Attempts to reconcile the two paradigms can create conflict and reveal 'internal inconsistencies' in the overlapping logic between these approaches (Činčera, 2015), and thus prominent scholars in EE and ESD suggest that sustainable education should follow an emancipatory, democratic and transformative learning approach (Wals et al., 2008, Jickling and Wals, 2008a, Wals and Jickling, 2002, Wals, 2011, Sterling, 2001).

Recent advances in consumption theory may offer some degree of reconciliation for this tempestuous debate. The previously discussed models

all draw upon a similar (albeit more complex) linear model to the traditional K-A-B theory. Assumption of a causal relationship between variables has been criticised for placing a strong emphasis upon the individual and the power of behavioural choice (Hargreaves, 2011, Shove, 2010). Therefore, it is argued that to transition beyond the constraints of individual agency in order to enable a societal transformation necessary, radically new ways of conceptualising social change is needed (Shove, 2010). Instead of a purely agency driven approach, many are now turning to a mediated ground between agency and structure, termed a social practice approach, in which individuals are the carriers of social practices and the focus becomes the organisation of practices, rather than the individual (Reckwitz, 2002, Warde, 2005). Spaargaren (2003 see fig.2.4) presents these ideas as social practices mediated by lifestyles (for actors), by systems of provision (for structure).
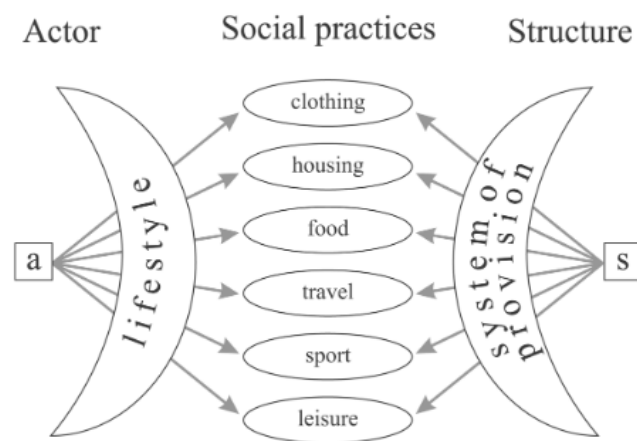


*Figure 2.4: The social practices model (source: Spaargaren, 2011)*

It is possible to see from a social practice perspective the potential for using this model as a mechanism within EE for bridging the theoretical divide between the emancipatory (agency) approach, and the instrumental (structure) approach (Wals et al., 2008). Going some way to satisfying the concerns of educators and geographers who view rigid behavioural change models as outcome-driven and information-intensive, this approach enables the social practices of learners to be examined and be influenced by student participation as well as institutional provision, thus utilising a progressively more deliberative approach. By placing the focus upon practices rather than individuals, the 'internal inconsistencies' observed in educational programmes which seek to straddle the theoretical divide may be placated.

Exploring the intersection between environmental education and behaviour change is a core contribution that this thesis seeks to make to the field – notably by merging largely isolated insights and understandings. While environmental education has long struggled with its identity, in particular relating to the purpose of education for sustainability, it is notable that this tension also exists within the literature concerning behaviour change. Many educators who seek ways to make education more responsive to the demands of a changing and uncertain world do so through behaviourist approaches, and justifiably see education as a mechanism for equipping a citizenry capable of navigating turbulent times of environmental and social crisis. Tensions exist between those who see education as having purpose from an instrumental point of view, and those who seek to equip this new citizenry with critical competencies more recognisable from an emancipatory education perspective. Behaviour change literature such as social practice theory embraces and recognises this tension and offers opportunities for understanding more nuanced and pragmatic ways of placating them.

By bringing together the understandings from behaviour change alongside those debates within educational philosophy, a new focus emerges for exploration. This thesis finds opportunities in this tension and promotes a blended understanding of behaviourist versus free choice intentions and instrumental versus emancipatory educational approaches. The core concern here is to find pragmatic openings for grounding relational understandings of environmental education into educational practice. Behaviour change models emerging from social psychology such as social practice theory proffer one such opening. To better understand the social practices as they occur within environmental education in residential settings, it is important to consider the spaces and places in which this type of learning occurs. There exist a large range of approaches to learning in the outdoors, and it is relevant to consider a selection of these approaches and where they take place in section 2.3.

## 2.3 Locations and learning: the places, spaces and status of outdoor learning

While classroom pedagogy has long been seen to be replicable and standardised across multiple differing settings within the mainstream view of education, outdoor learning has managed to counter these suggestions by often responding dynamically and directly to the environments within which

programmes and activities take place. Kraftl (2013) points out that spatiality and the context of place are important precursors to developing a relational ontological conception of education in the outdoors. As the theoretical basis of this thesis is indeed relational it is pertinent to consider the spaces within which outdoor learning takes place, and how educators have made use of the outdoors to satisfy the various aims of their programmes.

In section 2.3.1, outdoor learning in a UK context is first considered to locate the reader within the contemporary drive for increasing contact with the outdoors within mainstream as well as alternative education. Section 2.3.2 turns to a specific locality, or more correctly, set of localities for outdoor leaning – namely residential settings – which form the locational basis for this work. Finally, focus is placed upon the role of fieldwork and residential trips in the UK.

### 2.3.1 Learning in the outdoors in the UK

'Learning in the outdoors' is a term which captures a range of approaches and typologies of education which take place typically outside of the normal classroom setting. Outdoor education, as it is often termed, encompasses forms of learning which make use of a range of outdoor environments for the purpose of learning. Although many practitioners and researchers focus on 'natural environments' – often urban settings provide the forum for outdoor learning to take place. Priest (1986) added to the definition of outdoor learning by suggesting that it involved a network of relationships, and that through experiential learning, students would make use of multisensory experiences to explore the meaning of these relationships with place, curriculum and each other. Since the outset of a formalised outdoor education, Allison (2016) notes that there have been 'six waves' of outdoor education beginning with colonial manifestations of outdoor education as part of an exploratory approach to empire building, hastened by the work of the Royal Geographical Society, up to a more contemporary approach to outdoor education typified by the previously discussed work on environmental education, sustainability and climate change education and more recently, citizenship and intercultural education.

Natural environments provide the backdrop to much of what we know as outdoor learning, and certainly, this can be seen in the surge of interest in the

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past decade in forest schools and outdoor classrooms in schools in the UK (Knight, 2013). Based on Scandinavian outdoor pedagogy, forest schools make use of a mix of woodland environments, focused activity and child led learning. forest schools are reported to aid the development of attitudes toward the natural world  (Turtle et al., 2015) as well as improving children's wellbeing (Capaldi et al., 2015). Many forest schools in the UK have been established as standalone sites, separate to schools themselves, often hosting local primary schools who visit. However, a growing number of schools are now training forest school providers and making use of their own school grounds for outdoor learning.  Schools themselves are also becoming increasingly interested in outdoor learning and the benefits held for their students as part of the regular taught day. Much recent research has focused on the beneficial qualities of learning in natural environments. Amongst the stated benefits, those most cited include; heightened wellbeing and reduced stress, improved social function and cohesion, improved academic attainment, and increased physical fitness. It is not surprising that this research emanates from a mix of subjects and disciplines, from sociology to psychology and physiology. One of the largest reviews of learning in natural environments in the South West of England found that outdoor learning components of the school day had positive impacts on student's enjoyment of lessons, social skills, connection to the natural environment and engagement with learning. Teachers also reported that providing their students with opportunities to take part in outdoor learning improved their teaching practice and increased their sense of health and wellbeing (Waite et al., 2016).
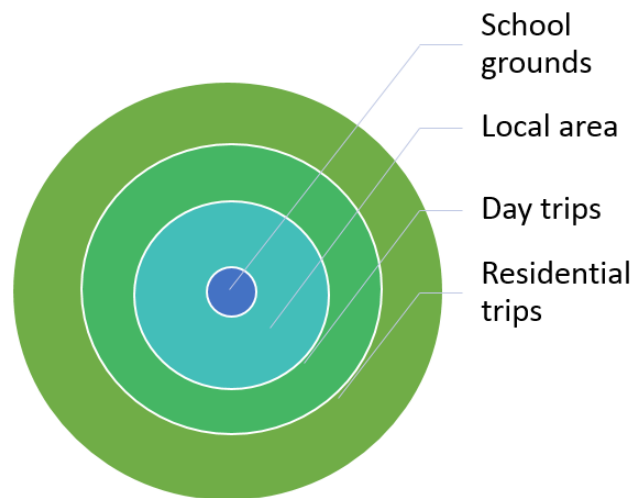
*Figure 2.5 Spaces of outdoor learning (from Beames et al., 2012)*

While much outdoor learning takes place within the school day, and often within the school grounds, other 'zones of learning' in the outdoors exist (Beames et al., 2012). These zones of learning progressively extend out from the school gate, into the community, local area and eventually further afield (see figure 2.5). Community based learning is often seen to be an aspect of outdoor learning, although contains a distinctly social aspect, as opposed to much environmental education. Learning within the community involves an interdisciplinary approach, and an encouragement to see the school as a part of a wider social network. (Smith and Sobel, 2014) suggests that this bringing of community to the school and bringing the school into community entails a distinct element of social justice education along the lines of Freire's teaching (Freire, 1970). The allied practice of 'place based education' also takes its cue from social justice and citizenship education as it attempts to connect the local with the global, and to invoke a 'place consciousness' so as to "re-inhabit our communities and regions in ways which allow for a more sustainable relationships now and in the long-run" (Gruenewald and Smith, 2014 p.viii).

Outdoor learning has long been noted for therapeutic and wellbeing benefits and as such a range of pedagogical approaches specialising in the therapeutic qualities of being outdoor have emerged. Recent developments in the US have seen 'adventure therapy' develop on other therapeutic initiatives aimed at tacking mental health issues and psychological wellbeing. Often culminating in a residential component, the approach is to make use of

'wilderness areas' to offer healing to individuals suffering from mixed mental health issues (Bowen et al., 2016, Norton et al., 2014).

Elsewhere, and allied to restorative ecological educational practices such as earth education (Van Matre, 1990, Young et al., 2010), ecopsychology has shaped approaches to engagement with the natural world. Ecopsychology, and particularly its related sub-discipline ecotherapy, provides insights to ways in which humans come into contact with the natural world. Emerging from the teachings of Jung (2011), Naess (1995) and Abram (1996, 2011), ecotherapy operates between identity, self, consciousness and the setting, and brings with it an understanding of the psychological attitudes toward behaviour alongside understanding of the spiritual and metaphysical sense of being, cultivated by deep ecology (Buzzell and Chalquist, 2010, Jordan and Hinds, 2016). A key aspect of the ecotherapy approach is to call into question beliefs and attitudes held in relation to the self and the world, and makes use of the 'performance' of the non-human-world to achieve this (Clinebell, 2013). Ecotherapy operates on the emotional thresholds of human experience in association with nature and calls into question its 'otherness', making use of metaphor and symbolism to do so. Buzzell (2016) comments that ecotherapy operates as 'mind-body-soul-spirit', suggestive of an ecocentric worldview. Connecting with emotional geographies, spaces of transition operate to "transgress boundaries of care" (Jordan and Hinds, 2016). In these transitional spaces, emotion is maintained spatially rather than individually, in sensory 'atmospheres', as termed by Kraftl (2013). These relational 'flows' which engage people with place and human with non-human are at the heart of the ecotherapy approach.

A related conception of the healing and therapeutic opportunities afforded by outdoor learning are seen in the form of 'care farms'. Originating in the Netherlands, care farming aims to work with and nurture vulnerable people, the elderly, and those suffering from addiction and more recently young people (Bruin et al., 2009, De Bruin et al., 2010, Elings and Hassink, 2008, Sempik and Aldridge, 2006). Also termed Social and Therapeutic Horticulture, Care Farming aims to work with principles of community building and meaningful work in farm or horticultural settings, responding to issues of illness and exclusion by creating opportunities and activity. Often these can

be allotments, city farms, public gardens or more traditional rural farms. With its roots in hospital rehabilitation and occupational therapy, care farming aims to decentre the concept of therapy and instead focus on "improving the well-being of the individual in a more generalised way [through] the attainment of employment, an increased sense of self-esteem or some other perceived benefit" (Sempik and Aldridge, 2006 p.149). While care farms are often seen as providing opportunities for those suffering from various ill health, the approach has been adopted by those working in education, specifically with disadvantaged youths. The concept of farming as a way of engaging with 'hard to reach groups' such as children excluded from school is well documented (Kraftl, 2013, Hassink et al., 2007) - in particular with recognition of the power of contact and care for animals on farms (Hassink and Van Dijk, 2006).

Recent developments of this type of educational intervention in the UK has seen the rise of charities operating with a specific 'land based' remit. Some of the most well-known of these are 'Jamie's Farm' (Farm, 2017), and 'Farms For City Children' (FFCC, 2017). Their approach mirrors that of therapeutic horticulture, but focuses specifically on the role of land based work in providing greater opportunities, developing resilience and self-belief in young people, otherwise disadvantaged by social background or learning disabilities. Attention has been turned to the role of non-human assemblages themselves as part of the experiences of learning in such therapeutic settings. Gorman (2017) suggests the idea of a 'therapeutic landscape' in which both humans and non-humans, including the farmed animals, co-create the propensity for therapy to take place. Gorman suggests however that a deeper questioning should be encouraged through which the integrated nature of non-human nature as co-constituents of therapeutic spaces might emerge. These new articulations and considerations of how other than human environmental constituents might help to inform and curate environmental experiences of students is clearly a rich and important area for development. The role of non-human environmental encounters connects with objectives 3a and 3b.

The provision of day trips and excursions make up a key element of the UK outdoor learning tradition within formal education. While community based and place based learning are suggestive of localised approaches to learning

in the surrounding environment of the school, outdoor education is often associated with learning further afield. Many schools run day visits or field trips to local amenities and attractions, some of which constitute formulations of outdoor learning (Behrendt and Franklin, 2014). For many children and young people learning in school, field trips and fieldwork, linked with the curriculum, constitute the most usual form of outdoor learning beyond primary level in the UK. The next section of this chapter turns to the role of residential trips in providing opportunities for outdoor experiential learning.

### 2.3.2   The residential learning model of outdoor and environmental education.

In the UK, the 'residential' component of learning has become synonymous with various stages of study. There are various types of residential approaches to outdoor learning. Possibly the most ubiquitous in the UK is that of the 'adventure education' or activity camp. This type of residential learning is typically focused on physical activity, team building and developing confidence and resilience within individuals (Richmond et al., 2017, Cooley et al., 2015, Scarf et al., 2017). Social connectedness and development are generalised goals of adventure learning which make use of activities such as climbing, bush craft, kayaking and hiking to develop the individual's sense of self-worth and confidence. Often the pedagogy deployed in OAE involved deliberate risk taking in order to achieve these goals (Ewert et al., 2014).

Taking a somewhat similar approach to the adventure education model of residential learning experiences, the fieldwork approach to experiential learning is often situated within a residential setting. One of the leading providers of outdoor learning and fieldwork in the UK, the Field Studies Council (FSC) , suggest that over 140,000 people visit their outdoor education centres each year, most of whom are primary and secondary aged students taking part in residential learning activities lasting between 2-7 days (FSC, 2015b). While there are indeed similarities with adventure education residentials, the type of learning offered at FSC centres is normally curriculum centred and in many cases carries an assessment component, either directly through field diaries (e.g. Dummer et al., 2008) or at a later stage through examination on the methods employed or through a written assignment, as is the case with A-level geography and biology in the UK. For the FSC, the latter is almost exclusively the case with groups visiting field centres throughout the

year on a residential basis to fulfil an assessment component of the curriculum and specification being studied.

However, the experiences of fieldwork, especially those which are residential, stretch far beyond the instrumental focus of assessment for most of the students involved. *Learning Away* (2015)*,* a report commissioned by the Paul Hamlyn Foundation to investigate the broader benefits of residential learning suggested that "residential learning experience[s] provide opportunities, benefits and impacts that cannot be achieved in any other educational context or setting" (p.xiii). Impacts on relationships between students and staff as well as between students themselves were highly noted (see table 2.2). This report made use of a mixed methods approach which largely consisted of longitudinal analysis using surveys and metrics. Focus groups were also made use of post course (Kendall and Rodger, 2015). It is noted that for the purposes of this study that this report did not extend its methodology into inductive analysis of student's experiences during the residential itself, and therefore clear opportunities exist to build on this work.

| Key Themes | Key Findings |
|---|---|
| Relationships | Opportunities to develop new peer relationships; opportunities to develop and enrich staff-student relationships in new contexts. |
| Resilience, self-confidence and wellbeing | Confidence improved with themselves, learning and relationships with others; confidence outcomes directly linked to other outcomes (engagement with learning, relationships and leadership skills). |
| Engagement with Learning | Particularly for secondary; improved behaviour observed; helped to reengage those who were in danger of exclusion; residential particularly beneficial for those who had difficulty concentrating and engaging in the classroom. |
| Achievement | Improved confidence in lower attaining students; improved attainment in school as a result of residential; better awareness of strengths and weaknesses. |
| Knowledge, skills and understanding | Becoming more independent learners; learning to work as a team; deeper understanding of the subject (secondary); study and research skills; improved creativity; improved vocabulary, speaking and listening skills. |
| Cohesion | Sense of community developed; interpersonal relationships developed; sense of belonging. |
| Leadership, co-design and facilitation | Significant impact on secondary aged students; priority to include leadership activities as part of residential |
| Transition | Preparation for transition to new leering levels / schools evident; social interaction and cohesion important for transition; |
| Pedagogical skills | Staff developed new ways of teaching and learning; development of an integrated curriculum; new relationships with colleagues; professional development; awareness of students' family needs |

*Table 2.2 'Learning Away' Report (2015) – Key Themes and Findings*

Socialising is recognised to be an important part of such trips, as is personal development and the very experience of being away from home and in new environments. Many of these aspects carry challenges and difficulties and present opportunities for young people to experience new things, places and relationships (Taniguchi et al., 2005, Foran, 2005). So too, residentials are said to offer a community in which living together enables students to understand their relationships with one another differently (Kendall and Rodger, 2015). Yet, the stories of these personal experiences are seldom told, and play little part in the programme design of field courses with an explicit focus on environmental knowledge, exams and assessment. In cases where

this has been explored, these personal experiences are seen to be important for developing environmental sensitivity and nature connection, enhancing enjoyment of learning, improving learner wellbeing and fostering pro-environmental behaviour (Taniguchi et al., 2005, Davidson, 2001, D'Amato and Krasny, 2011, Bogner, 2002).

The two approaches to residential environmental education and outdoor learning already discussed can be seen to be distinct elements of an overall understanding that experiences outside of the classroom 'matter' (Richmond et al., 2017). However, these are by no means the only approaches open to educators in the UK. Many approaches occupy a blurred middle ground between instrumental curriculum driven approaches and activity or therapeutic approaches to learning. As has already been discussed, much outdoor education is noted for its ability to provide for cognitive, emotional and physical development regardless of the desired academic impact. Therefore, it is worth considering those models of learning which focus on the experience of being in the outdoors, rather than noted outcomes.

The residential learning approach to outdoor education complies with Beames et al. (2012) assertion that residentials are the further most 'zone' of outdoor learning, and therefore hold a particular place in the hearts of educators (see figure 2.5). While the many variations which have been covered here occur within the UK, the majority of residential education visits at secondary school level occur as a result assessment requirements in accordance with the national curriculum. The subject areas most familiar with the 'residential' as it is known, are the fields of biology and geography. Residentials in accordance with the curriculum needs of these subjects are often referred to as 'field trips'.

Fieldwork provides the opportunities to "test ideas and concepts from the literature against the 'real world' of the field" (Dummer et al., 2008 p.459). Fuller et al (2006) build on this concept of the theory meeting the field as a 'spiral curriculum' where theory and practice reinforce one another. Kent et al (1997) also emphasises the importance of the application of abstract theory, stating that field studies "have a role as a vehicle for the integration of many theoretical and practical concepts" (p. 313). Historically, fieldwork in geography has made a documented shift from observation to participation, and from dependency on teacher dictation to autonomy of learning and

approach , with field studies moving from a passive 'tour guide' experience in the 1950's, to a student-centred approach today (Kent et al., 1997, Marvell et al., 2013). Along with a more student-centred approach to learning, a fundamental shift has been noted toward scientific enquiry methods and empirical enquiry pathways (Hill and Woodland, 2002), which typify the investigation process of modern geographical enquiry. Hill and Woodland (2002) go on to caution that varying epistemologies exist ranging from critical-rationalist to a humanistic approach, and that "both epistemologies [are] needed for a well-rounded and conceptually sophisticated environmental education" (p.553).

While most voices are in support of field studies to support the learning of students, these are often accompanied by a sceptical warning: that going into the field in itself does not yield knowledge. Saunders (2011) states that fieldwork is not just seen as a way of engaging students, and instead suggests that field courses should be aligned within the curriculum (Fuller et al., 2006) and that deeper modes of learning are engaged (Hill and Woodland, 2002). Nairn (2005) also suggests that field study may help to reinforce misconceptions within human geography fieldwork. She suggests that students are subject to essentialising the subjects of their learning, reinforced by certain modes of field work. Essentialism emerges when there is a lack of critical focus on the underlying conditions behind the studied environment, persons or community. Nairn (2005) emphasises that a reliance on the evidence of experience may reproduce rather than contest existing ideological systems or stereotypes. Further to this, Nairn (2005) is critical of the uncontested notion of 'truth' through the students lived experience. Foskett (1999) also observed that "while there is evidence to support the value of fieldwork, most is circumstantial and inferential rather than objective and research based". However, Kent (1997) suggests that there has been a gradual shift towards more empirical approaches to establishing the field while much has been done to strengthen the rationalist standpoint (Kent et al, 1997; Hope, 2009; Fuller et al 2003). Fuller (2006) in Hope (2009) acknowledges that there is still a need for research into the relationship between fieldwork and learning, despite advances in pedagogical approaches.

Outdoor learning is a varied and contested sub-discipline of education in which the notion of 'good learning' or 'the right approach' does not readily exist. It is clearer, however, that outdoor learning carries with it much which is seen to be beneficial and helpful to students who experience it. While there are many of what might be termed 'alternative' approaches to outdoor learning such as forest schools and adventure education initiatives, as well as experiences with a therapeutic focus, many young people come into contact with the outdoors as part of the curriculum focused experiences of field trips and residential opportunities to 'learn away' from home and school at residential centres which in themselves offer new routines, structures and norms. While these outdoor learning experiences are without doubt linked to the formal learning pathways and associated outcomes of school, there exists multiple opportunities to see these residentials as engaging of other facets of student experience in the outdoors, much of which can be seen to be relational in nature. To better place this notion in the context of this thesis, it is necessary to understand the environmental ethics and value debates which underpin environmental education and sustainability education today. It is to these debates, discussions and considerations that the chapter now turns.

## 2.4 Environmental ethics and ontological thresholds in outdoor learning for sustainability

Modern environmentalism, of which environmental education is a part, is informed by a rich history and culture of ethics – the contemporary nature of which it is important to understand to unravel the nuances of environmental education programmes and their associated aims and outcomes. As well as making links between environmental ethics and their significance for education, this section will set out a conceptual framework for considering a relational ontological position from which to engage with the empirical chapters which follow. This section is structured in three parts. Beginning with an overview of environmental ethics, the chapter engages with the larger debates which underpin much of the literature and philosophy of today's debates. In the second part, value positions are uncovered in which conceptualisations of instrumental and intrinsic value are discussed. This section relates importantly to the focus of the thesis, as historically much of the work of environmental educators has been seen to focus on instrumental

valuation of nature, whereas today voices are gathering to suggest a deeper and more intrinsic engagement with the natural world through education programmes that might be more appropriate to our times. Finally, the section concludes with a consideration of how a pragmatic, pluralistic and relational ethical position is now emerging from debate, and how these positions inform current education thinking and the work of this research.

## 2.4.1  Situating environmental ethics

Situated in environmental philosophy, contemporary environmental ethics both shape and challenge societal outlook on the environment and the human place therein. Environmental problems challenge our understandings of right and wrong, as well as our ways of relating to these issues more than ever (Jamieson, 2008). Environmental ethicists broadly agree that nature – that is to say the 'non-human' world - is undervalued, and requires a set of ethical principles to guide our relationship with(in) it (Kalof et al., 2007, Jamieson, 2008), therefore many attempts to provide a culturally appropriate 'ecological ethic' (Curry, 2011) with which to relate to the natural world have emerged. For environmental and sustainability education, this is important, as it is the cultural context which informs the priorities of education in the given moment. As discussed in section 2.2 of this chapter, the global agenda of environmental and later sustainability education has shifted since its inception in the 1970's. This shift has been informed, yet also informs, the ethical ground and value basis upon which it rests.

The study of environmental ethics, as situated in ethical philosophy, emerged in the 1970s with the growing prominence of environmental well-being in social conscience and the contention that environmental problems and their solutions emanated from within philosophy. Accompanying the growth of environmental ethics, EE emerged as a response to the realisation that there was a need for people to reconnect with the environment and was seen as a mechanism by which the type of citizens who could affect the changes which philosophy demanded might be produced (Stapp, 1969). Many in environmental education concerned themselves with a normative understanding of how environmental ethics could inform a more enlightened and environmentally aware citizen. However, not all voices were in agreement with this so-called instrumental position. From a normative position, values

held in relation to the environment are predetermined known entities, which although are subject to debate, form part of the moral code, and create social norms against which actions and behaviours are judged (Stern, 2000). From an educational perspective, this can be seen as problematic as the implementation of norms of conduct and instrumental governance of behaviour has been argued to be against the democratic nature of education (Jickling, 1992, Jickling and Wals, 2008a, Wals et al., 2008). Instead, it is argued that education should follow a less normative course and open the conversation to debate and uncertainty (Wals, 2010b, Sterling, 2010).

Much of the value-based work of the social sciences stems from a relativistic position (Kalof et al., 2007). The importance of this position from the point of view of environmental philosophy is its ability to transcend the confines of the normative debate on rational value positions which have dominated discussions on value-theory in the latter half of the 20th century, and indeed most of the modern post-industrial era. Importantly for education, a subjective/relative rather than an objective/realist position offers plurality of meaning based upon the context of the subject-object relation – in agreement with the pedagogical perspectives of Wals (2011, 2007a), Jickling and Sterling (2017a). Summarising these claims, Curry (2011) states, "everyone's apprehension is necessarily from, and constituted by, a particular biologically embodied and socially embedded perspective" (p.30). In other words, the basis upon which a value-judgement is held is dependent upon the observer and the situation, and so it can be argued that this position remains much more representative of the multiple views on the environment, and ways in which environmental value is expressed, than purely rational attempts. In addition to these two important epistemological positions, three prominent traditions inform the debate; that of deontology, consequentialism and virtue ethics. Each of these traditions have their own approaches to ethical meaning and conduct in society and help in turn to facilitate the discussion on environmental education and ecological ethics. The positions are summarised in table 2.3. It is important to understand that these positions all play out within education today, and thus inform environmental education pedagogy, whether explicit or implicit in programme design.

|  | **Deontology** | **Consequentialism** | **Virtue** |
|---|---|---|---|
| **What is it?** | 'Actions based on duty are 'morally right' regardless of consequences'. | 'The value of an action derives entirely from the value of its consequences' | A 'virtuous individual' will make good/right actions naturally. The exercise of virtues produces a 'good' person. |
| **Where did it come from?** | *Kant* Highly rationalist modernist approach to 'duty'. Dominant academic ethical theory. | *Bentham, Stewart-Mill* Post-industrial (modern) era ethic. Dominant ecological / economic ethical theory. | *Aristotle* Classical philosophy. Experiencing a resurgence of interest due to potential within an ecological ethic. |
| **Who/what does it include?** | Limited to humans as rational agents. | Limited to sentient beings | No limit to who/what can be the object of virtue. |
| **What scale does it work at?** | Individual / Rationalist | Collectivism (only of sentient beings). | Agent as actor, but with the possibility to extend to community / society. |
| **What are its traits?** | Rule based conduct. Universal and categorical principles. Objective. Absolutist. Axiomatic. | Utilitarian wellbeing of the many over the suffering of the few. Objective measures for universal accounting. Both subjective and objective forms. Cost-benefit. | Based upon subjective / culturally contextual principles of moral behaviour towards wider wellbeing of society. |

*Table 2.3 Key Ethical Traditions [Summarised from Curry (2011)]*

The ethical traditions which Curry (2011) examines, shown in table 2.3, work at differing scales, and therefore hold varying abilities to be applied beyond human concerns. It is noteworthy that out of the three identified, only virtue ethics comes close to what Curry calls an applied 'ecological ethic'. This is

because deontological and consequential ethical theories exhibit rationalism and objectivity which fail to permit those organisms outside of the human (in the case of deontology), or sentient beings (in the case of consequentialism) value or status within their worldviews. However, Curry identifies virtue ethics as the most promising of the three for forging a new ecological ethical theory. Virtue ethics has been explored alongside an ethics of care, as a potential set of perspectives from which to theorise new a pedagogical-ecological ethic (e.g. Russell and Bell, 1996). Virtue ethics also inform broader connotations of relational ethical positions which provide the ethical standpoint with underpin the objectives of this thesis. Relational ethics as a subset of virtue ethics will be returned to later in this chapter in section 2.4.3. However, for now it is useful to consider them in accordance with other, more mainstream ethical positions on the environment. Alongside these overarching ethical debates, values have also played an interesting and important role within philosophical literature on the environment. Values positions are considered in the following section.

### 2.4.2 Anthropocentric and nonanthropocentric value positions

The contemporary discussion within ethics has centred on the anthropocentric – nonanthropocentric debate. This debate has dominated discussion on the formulation of a set of ethical normative principles for environmentalism and remains contentious and unsettled. Representing polarised positions, anthropocentrism and nonanthropocentrism underline the fundamental relationship that humans have with the non-human world. Broadly speaking, anthropocentrism can be seen to be a 'human centred' position, prescribing value to nature only if it has use to humans, and iterates that nature cannot hold value without human use, whereas nonanthropocentrism asserts that while human-use value does exist, so too does non-human use value; that nature also holds value irrespective of its usefulness to humans. These distinctions of worldviews have also been articulated as various shallow and deep approaches to the environment (Blewitt, 2014, Baker, 2006). Further to this distinction, values are often operationalised in the literature by referring to instrumental and intrinsic value. One distinction which has been made between an anthropocentric and a nonanthropocentric position is whether nature is seen to hold intrinsic value; i.e. value in itself, or value "beyond its

usefulness to human beings" (Casas and Burgess, 2012 p. 185). Jamieson (2008) proposes that intrinsic value has been "the most important contested notion in ethical theory" (p.68).

Intrinsic value is often seen to be hard to pin down in theory, let alone in educational practice, and this has led some to comment that environmental educators have shied away from invoking an intrinsic approach to pedagogical practice. However, in recent years, intrinsic value has been established as a potential counter point to what is largely perceived to be an instrumentally dominated educational paradigm, returning to philosophies of those such as Jung (2011), Leopold (1949) and the Deep Ecology Movement of Naess (1995, 1984), and in turn giving rise to what is broadly termed 'ecological education' (i.e. Smith and Williams, 1999).

Instrumental value on the other hand is understood to attribute a 'usefulness' value to the non-human environment. Therefore, any position which asserts that there exists anything other than instrumental value in nature (intrinsic value) is a nonanthropocentric position. However, this notion is seen as simplistic and has been rejected by Hargrove (1992), who states that both intrinsic and instrumental values can be associated with both anthropocentric and nonanthropocentric positions. Hargrove argues this point by referring to Paul Taylor's conceptualisation of intrinsic value (Taylor, 1984) as being distinct from inherent worth; the former being a value attributed by a human valuer who "holds it dear or precious, loves, admires, or appreciates it for what it is in itself so places intrinsic value on its existence" (p. 150). Taylor is careful to state that this type of value is anthropocentric because humans choose to hold this type of value, but that it is distinct from instrumental or commercial value. Inherent worth, on the other hand is described by Taylor as "the value something has simply in virtue of the fact that it has a good of its own" (p. 151), and therefore, argues Hargrove (1992), it does not involve a human value judgement, rather simply a "spontaneous emotional reaction to sensory events triggered by an external source" (p.189). This set of defining principles enables Hargrove to convincingly argue that intrinsic value can be associated with all ethical positions. Additionally, Hargrove makes the suggestion that an objective value position which makes use of a 'constitutive moral framework' and is not subject to shifting societal norms would be the most stable position

for an applicable environmental ethic, and rejects calls for pluralistic, subjective positions due to their ability to succumb to 'shifting cultural baselines', which she fears will erode their foundations (Hargrove, 1992).

Debate concerning values and their positions relative to one another can seem rather superfluous to educational practice and the day to day act of 'being in the world', however, it is pertinent that value positions are considered a part of the contemporary debate on the meaning of education, for the cultural basis upon which education rests is informed by our ethical encounters with the world (Bonnett, 1999). This thesis concerns itself with understanding more fully the relational domain of student experiences when engaged with learning in the outdoors, yet these experiences sit within a cultural context which is not value neutral and within a world which is changing rapidly, for which it is strongly argued that we will need a new set of environmental philosophies, ethics and principles for engaging as part of it (Selby and Kagawa, 2015b).
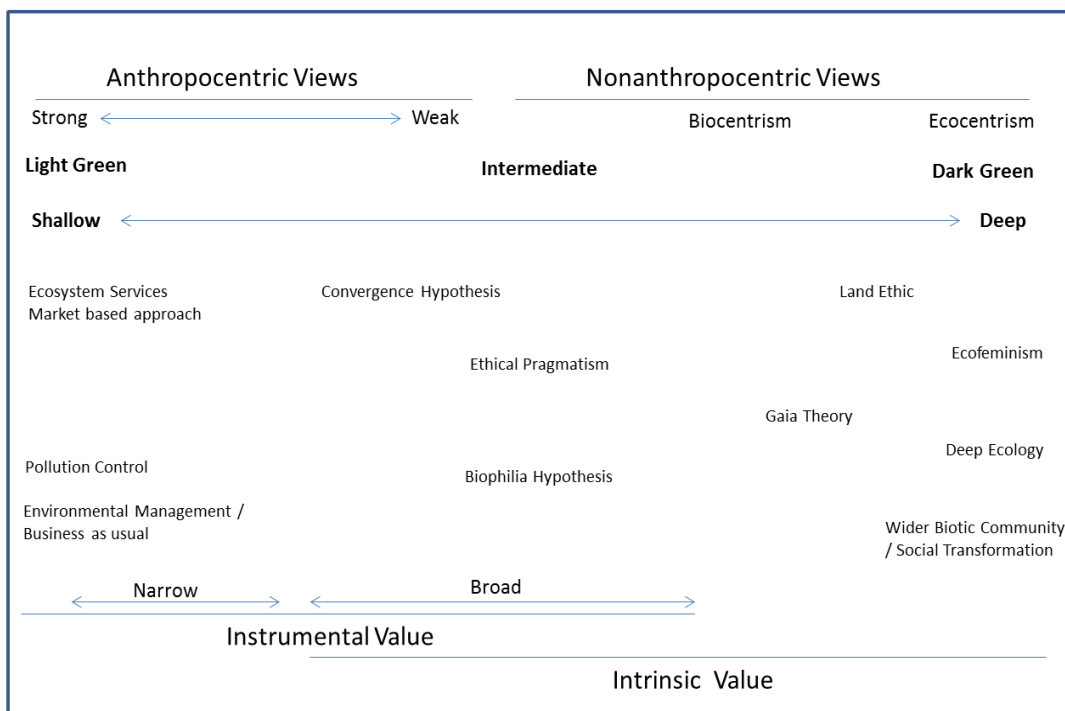


*Figure 2.6 Value positions and their associations (source: author)*

There is a middle ground of debate within environmental ethics, whereby the distinct polarised views of anthropocentrists and nonanthropocentrists alike meet and overlap. Historically, the continuum has been divided not only into these two opposing camps, but by using terms such as 'weak' and 'strong'

anthropocentrism, to denote the perspectives held therein by proponents of anthropocentric views (see figure 2.6). A strong anthropocentric position is determined by the steadfast concern for human instrumental values, whereas a weaker perspective offers some compromise and allows for the valuation of non-human nature (even if this value is still determined by instrumental concerns), and therefore would advocate a mediation of environmentally damaging behaviour. Cocks and Simpson (2015) offer some clarity on this matter; defining strong anthropocentrism as "a perspective wherein the nonhuman environment is typically taken to be a commodity… and is often considered a mere object of use" (p.218), and contrast this with weak anthropocentrism as "a perspective whereby the natural environment is still measured by its value to human beings, but the value is significantly expanded beyond the commodities associated with strong anthropocentrism" (p.5). This distinction is important for education, because although it has been remarked that much Environmental Education work is focused on instrumental anthropocentrism (see: Kopnina, 2012a), it is important to recognise that the debate is much more nuanced than a simple stand-off between dualistic positions. As previously discussed, it is observed that outdoor environmental educators would generally draw from a weak anthropocentric position, and invoke broad environmental instrumental values. However, an increasing number of scholars now centre discourse on an ecological ethic rooted in a deep ecological ontology and a relational, ecocentric education drawing from both instrumental and intrinsic value (see figure 2.6). In terms of the implications for research, educational experiences may be viewed in terms of their ability to promote deep or shallow environmental experiences, this relates not only to the material of learning, but also to the broader ethos of the *lived experience* of education and the practices held therein – especially in terms of immersive residential outdoor EE.

The field of experiential learning borrows from (and in a large part has shaped) ethical pragmatism and remains highly influential within Environmental Education (Dewey, 1938, Garrison, 1995). Pragmatism holds status in an Environmental Education setting due to its ability to deal effectively with uncertainty, experimentation and is in line with the ethos of experiential

learning. Additionally, it has resistance to deontological maxims and objective rules of behaviour so remains flexible to unknown and changeable ethical situations (Norton, 1991, Norton, 1984). In terms of the philosophy from which it draws its focus, ethical pragmatism offers education an opportunity to work with multiple meanings and explanations.

Another prominent, weaker anthropocentric voice has been that of E.O. Wilson, who's 'Biophilia Hypothesis' (Wilson, 1984) proposed that people hold an instinctive need to connect to and bond with other life, leading to enhanced wellbeing and fulfilment. Kellert (1993), who has helped to further the Biophilia hypothesis suggests that human well-being is instrumentally linked with our ability to connect to other life, which entails linking our personal identity with nature, and that a loss of this dependence results in degradation of emotional, cognitive, aesthetic and spiritual wellbeing. The emphasis of these philosophies upon human wellbeing is telling of a consequentialist position, and by utilising an evolutionary and cognitive approach it is rationalist (although openly utilises terms such as 'love' and 'care', which does not fit with a strict Kantian deontology, and indeed speaks more to a relational or virtue ethical position). The difficult positioning of affective concepts with cognitive evolutionary concepts has attracted criticism (Joye and De Block, 2011), however, the Biophilia hypothesis has also helped to inspire many views on the role of nature in child development and education. These include Richard Louv's own perspective on nature connectedness within children, a lack of which results in 'nature deficit disorder' (Louv, 2008), Khan's psychological structure for examining children's affiliation with nature (Kahn, 1997), and David Orr's writing on the future of education, and its role in reconnecting learning with the natural environment, in what he terms 'the coming Biophilia revolution' (Orr, 2004 p. 131-153 ). John Muir too, the Scottish environmental philosopher who helped to found the National Park movement in the United States in the late 1800's, whose views are often romanticised in outdoor and environmental education, subscribed to a similar philosophical outlook, although he pre-dated Wilson's thesis. All of these authors borrow from what is seen as a weak anthropocentric position, and utilise its easily accessible and rational means to make their case for an educational environmental ethic. However, their positions are all regarded as

anthropocentric, and critics suggest that they do not go far enough to widen the remit of their concern to include non-human life as something more than an instrumental 'add on' to human well-being (McShane, 2007, Curry, 2011, Naess, 1984).

To move beyond a human centred view, it is claimed an environmental ethic must become earth-centred, or 'ecocentric', and must accept intrinsic value. For EE this increasingly means widening the pedagogical focus beyond the anthropocentric and instrumental concerns of traditional EE practices, into a broader, interconnected ethical approach which recognises the existence of intrinsic value, but also acknowledges a diverse and wide range of environmental views. The following section looks at the so-called 'relational' ethical perspectives which have emerged from the ecocentric and intrinsically focused end of the value spectrum (figure 2.6), and in doing so, sets the scene for the ontological education context within which this thesis resides.

### 2.4.3 Toward a relational ethic

One of the earliest proponents of a contemporary environmental ethic was Aldo Leopold, who is much quoted and upheld as being a distinct forerunner in promoting a nonanthropocentric position (Callicott, 1999, Goralnik and Nelson, 2011). Leopold's Land Ethic "enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively: the land" (Leopold, 1949 p.204). In this view, the intrinsic value, or to use Taylor's terminology (Taylor, 1984), 'inherent worth' is understood to be central to the valuing of the 'wider community', regardless of its use to humans. However, Leopold's position is not just an intrinsic one, for it also makes use of the land ethic to argue for conservation in the name of instrumental (human) self-interest. In this sense, by putting the Earth rather than singular species at the centre of concern, Leopold's land ethic is said to be ecocentric and has since inspired many others to take up the work promoting an ecological ethic to guide environmental behaviour (e.g. Goralnik and Nelson, 2011). Moving further into the nonanthropocentric quarters of the intrinsic/instrumental debate, the work of deep ecologists has added distinction to the intrinsic voices from the far end of the continuum. The views of deep ecologists resonate with that of Leopold's land ethic, and help to articulate the distinction between environmental ethics in terms of shallow (or light green) and deep

(or dark green) approaches (Blewitt, 2014, Devall and Sessions, 1985, Drengson and Inoue, 1995, Naess, 1995).

Much of the work of ecocentrists relies heavily upon a subjectivist understanding of value, incorporating intrinsic or inherent value as a part of their philosophical outlook and placing significance on emotive responses to the environment. Relational pedagogies is one area of educational development where many ecocentric ideas find resonance. By placing emphasis on relationships, building meaning, care and identity, relational pedagogies help to promote emotional affinity within educational contexts (Papatheodorou and Moyles, 2008). Relational pedagogies hold potential for promoting ecocentric worldviews within education, whereby non-human relations are included, but also in a more holistic sense where transformative and critical worldviews emerge from connectivity, interdependence and relationships within learning (Sterling, 2004b). One of the most outspoken ecocentrists, and defenders of intrinsic value of recent decades is Baird Callicott. In Callicott's environmental ethic, space is made for subjective value and emotion, as perceived in a human-biological capacity. Callicott's ethic is based upon the affective domain being based within human sentiment, by stating that while value may be grounded in human feelings "neither the feelings themselves nor, necessarily, the breast or self in which they reside are their natural objects" (Callicott, 1984 p. 75), thus making a defence for the non-human origin of intrinsic value by stating that both instrumental and intrinsic value originate from the self, but it is the object of valuing which dictates how it is valued. Callicott's ideas of the emotive self being the vector for intrinsic value have gained traction with other scholars in recent years.

The work of McShane (2007) has furthered the claim of nonanthropocentrists that an anthropocentric perspective is limited by its adherence to instrumental value, and that only intrinsic value can provide for notions such as awe, respect, and love. McShane augments her arguments by detailing ethical norms as being constituted of 'norms for action', and 'norms for feeling'. She suggests that actions should be underpinned by authentic feelings towards those actions, and that "if ethics cares about how we act, then it ought to care about how we feel" (p.174). This rubs against the philosophy of deontology by rejecting a purely objective and rational basis for judgement of right or wrong.

By suggesting that people should be emotionally orientated towards their actions, McShane also builds a convincing argument that an anthropocentrism rooted within a rational framework leaves us emotionally wanting. Deep Ecologist Christian Diehm (2008) also points towards this shortcoming of anthropocentrism in an environmental education context, by referring to the act of getting to know trees through identification and learning names. Diehm suggests that instrumentalism of knowledge about trees and their inherent use for humans, whether in a broad or narrow sense, eventually gives way to an affective domain beyond instrumental terms. By getting to know trees by name, Diehm states, science can foster a 'spirit of reverence', and can help to create an 'experiential link' between understanding and kinship with nature, thus deepening the learner's ecological perspective (p. 10).

Some scholars (e.g. Taylor, 1986, Rolston, 1982) have argued that 'emergent properties' or systemic value exists which comes from a pluralist perspective and argues that there exist multiple voices and perspectives which inform our ethical view of the world; which can be seen as a "product of the interactions between the parts of the system" (Kronlid and Öhman, 2013 p. 28). It is from this notion of interaction that relation-orientated ethics stem. Rejecting the ethical view of individuals and human agency/value as the main point of focus, relational ethics makes the assertion that interactions and interdependency guide ethical action. Viewed through this lens, the principles of the 'wider biotic community' come sharply into focus:

*"Acting ethically involves more than resolving ethical dilemmas through good moral reasoning; it demands attentiveness and responsiveness to our commitments to one another, to the earth, and to all living things. Ethics is about our interdependency as well as our freedom, our emotions as well as our reason, and our unique situation as well as our human commonalities".*

*(Austin, 2008 p.687).*

Moving into a relational ethical arena, the dualism and moral extensionism which have become the hallmarks of value-orientated ethics are instead replaced by a more holistic view of human-human and human-nonhuman

interactions and relationships, and as such develop new 'radical ecologies', and ecological ontologies for relating to nature (Kronlid and Öhman, 2013). Relational pedagogies are a growing component in educational practice, emphasising the role of relationships within learning (Witmer, 2005, Boyd et al., 2006). Epistemologies of educators have additionally been noted to link with approaches to education, with relational links between transformative, constructive approaches and relational epistemologies (Brownlee, 2004).

Education has long been associated with concepts such as community, interaction, relationships and care (Noddings, 2002, Freire, 1970, Witmer, 2005). From Leopold's land ethic (Leopold, 1949), the Deep Ecology movement (Devall and Sessions, 1985), Callicott's subjective, emotional and intrinsic value-based ethic (Callicott, 1984, Callicott, 1999), and lessons learnt from an ecofeminist "understanding of how people's survival links to the future of the planet as a whole" (Salleh, 1997 p.17), a rich area for exploration emerges which encounters an ecocentric philosophy and calls for a normative ethic based upon principles of ecological interdependence, interaction and relationship.

## 2.5 Conclusion

The drivers, goals and outcomes of environmental education are anything but fixed. While much work has been done to move beyond the 'knowledge=action' paradigm of previous EE programmes, many agree that it is a theory still subscribed to in practice. EE may have moved on to become subsumed into the international agenda for sustainable development, while continuing to offer differing incarnations and educational initiatives broadly aligned with environmental concerns, education in the UK continues to make use of EE as a contextual component of curriculum based teaching.

Many mainstream encounters with the outdoors and non-human environments occur while away from the normal setting of schools and home on residential fieldtrips. These field trips are seen to be beneficial for a wide range of reasons, ranging from academic development, to self-esteem, wellbeing and improved physical health. In addition, recent research has pointed out that relationships lay at the heart of learning in these settings, and that some of the most significant outcomes of residential learning are relational, with improved relationships reported between students as well as

between students and staff. It is clear from current research that despite the instrumental aims and drivers of this type of learning, significant outcomes are occurring in unmeasured and unknown areas of student experience.

Alongside these observations, scholars are reporting a lack of creative and critical engagement with the remit of sustainability education and with environmental education. It is agreed that rapidly changing times require new ways of understanding our engagement with the world at many levels, and that sustainability education now needs to locate a more rounded epistemology from which to operate (Selby and Kagawa, 2015b). This has been variously discussed as an ecologically focused education which stems from a deeper relationship with the natural world- and for education to enable a process of co-creation and 'being in the world' to occur (Nicol, 2014).

Two key paradoxes stand at the gateway of these concerns – the first is that humans are seen to be contributing to a rapidly degrading natural environment and to a distortion of the social, cultural and ecological fabric that binds us to the world, while at the same time we are becoming increasingly estranged from that world – contributing to a wide spread 'extinction of experience' (Soga and Gaston, 2016). The second paradox is that while the global agenda for sustainability has put forward the Sustainable Development Goals (UN, 2015), which apply in a large sense to the endeavours of environmental educators, these goals are highly fixed and objective in their nature – while the world becomes increasingly turbulent and uncertain.

These two paradoxes demonstrate that education initiatives now need to become concerned with the experiential components of contact with the natural world in a way which fosters and makes sense of new epistemological thresholds, while at the same time operating within a pluralistic and subjective framework. Additionally, these core debates within contemporary environmental education shine a light upon the field of behaviour change. Instrumental and emancipatory positions and approaches within education have, for many decades, been central to the difficulties which have haunted environmental education and more recently sustainability education – as is demonstrated by the second paradox highlighted above. However, recent focus upon social practices and structures have given rise to new ways of thinking about the aims and drivers of EE. The focus upon practices suggests

an opportunity to work within a blended understanding of education as it operates within both instrumental and emancipatory pedagogical frameworks.

Understandings of behaviour change are also demonstrating an increased need for focus on social interactions and interpersonal relationships within our communities. Relationships are seen to be prominent aspects of student experiences at residential learning centres – therefore further opportunity to understand more fully the nuances of social interaction in these settings may provide insight into the social norms and structures which guide environmental behaviours.

From an ethical perspective, much ground is open for exploration regarding the nature of student experiences as 'lived experiences' within outdoor settings. Relational ethics offer new ways of understanding these lived experiences as experiences of connectivity and conviviality, not only within an interpersonal, human-focused setting but also in association with the other-than-human world. Making use of ethical pragmatism and ecocentric understandings of humans and the natural world, opportunities emerge to discuss the everyday, mundane and otherwise instrumental experiences of learning in various settings as relational experiences co-constructed as part of a reciprocal world. The Biophilia Hypothesis, The Land Ethic, and other ecocentric theories which accompany them provide a rich context for exploring a rethinking of what it means to 'learn in the environment', and points to a new way of conceptualising environmental education for the 21st century.

This chapter has brought together three key areas of literature; behaviour change, environmental education and environmental ethics. These areas are populated by a diversity of epistemologies and approaches, many of which are distinct from one another. However, as has been discussed, there are many opportunities for bringing together insights from each of these, and synergies are also evident. Figure 2.7 demonstrates how theoretical frameworks resonate with one another, and where opportunities exist to contribute to the objectives and aim of this thesis. Three epistemological areas of literature have been presented as pertinent for the aim and objectives of this thesis; environmental ethics, environmental education and sustainability education, and behaviour change. Underpinning each of these literature areas are theoretical constructs, useful for analysing and discussing the empirical

findings within this research. This theoretical framework comprises; relational ethics, typologies of environmental education including emancipatory and instrumental approaches, and social practices. From an environmental ethics standpoint, the core contributions to the thesis focus on a broad understanding of relational ethics, stemming from virtue ethics and associated with an ecocentric relational ethic. However, going further, this epistemological position also holds within it much which is familiar to educators grappling with the tensions within debates surrounding the purpose of education, not least the necessary but difficult arguments surrounding education for sustainable development and sustainability education more generally.

This leads on to the pedagogical contributions that the literature makes to the thesis. From an educational perspective, multiple avenues are open for exploration in terms of purpose and approach to environmental education and sustainability education. However, the difficulties in finding common ground between paradigms populated with instrumental and emancipatory ideologies are also evident. Held within this debate there is clearly fertile ground to explore from a blended position. From a nuanced and pragmatic perspective, educational practice is able to borrow from both emancipatory and instrumental positons, as well as seeking the subjective, pluralistic and more contrasting qualities within objective and curriculum focused programmes.

Finally, the blended approach to environmental education practice also resonates with debates emerging from the field of behaviour change. In particular, social practice theory offers a mirror to the pedagogical blended and pragmatic positon between openness and held approaches. Namely, a middle ground between individual agency and structural supervision. By placing focus on practice, behaviours are better understood to be emergent properties of culture, setting and choice. Interestingly form an educational perspective, residential field centres offer a new cultural setting in which to explore environmental behaviours alongside pedagogy and environmental ethics. Connecting clearly with each of the three objectives, these conceptual areas interlink and support one another, while the crossover between these areas of literature offer innovative ground for exploration of environmental behaviours, attitudes and practices (see figure 2.7).
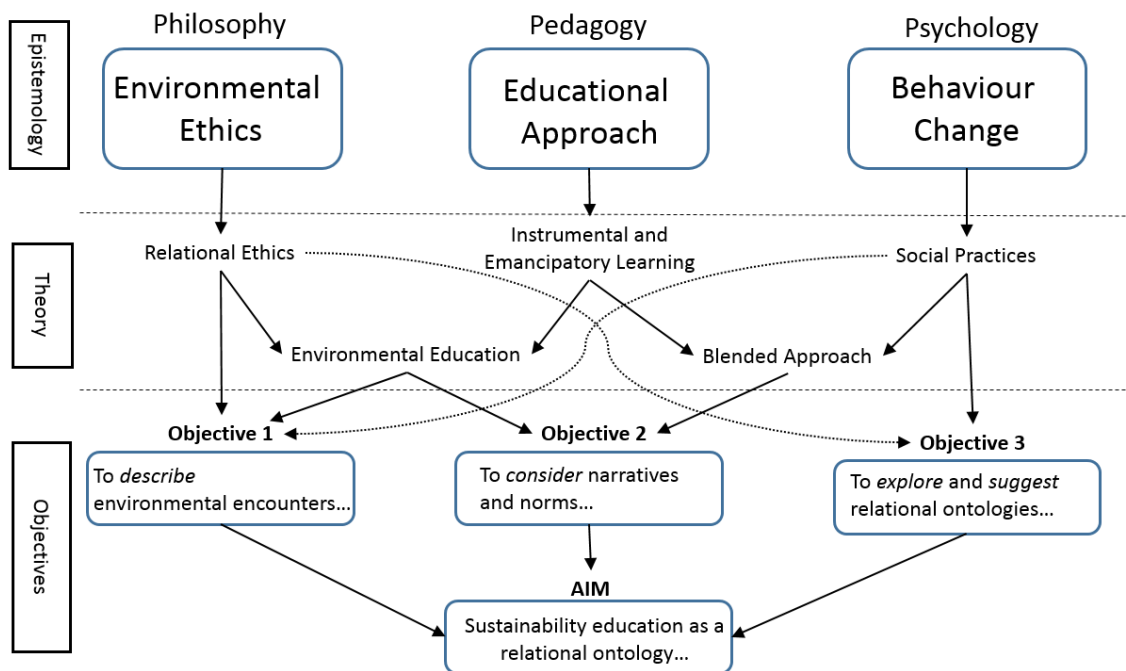
*Figure 2.7 Linking theoretical areas with research objectives*

From these observations, it is appropriate to state that this thesis postulates to make use of recent observations, debates and research concerning the nature of environmental education and to further these ideas from a deep ecological, relational perspective. While the evidence exists to suggest that learning in the outdoors, and learning at residential education centres offers broad benefits to the individual, much less has been said of how these benefits are constructed from a relational perspective, beyond observing that relationships between one another improve. In addition, it is appropriate to move beyond the dualistic tendencies of the instrumental / emancipatory divide, to explore these relational components of learning in the outdoors in differing philosophical settings. Methodologically, it is therefore clear this work will need to make use of research locations which operate using different learning approaches and philosophies. The methodological foundations used in this research are now discussed in chapter three, which in turn sets the scene for the empirical chapters which follow.

# Chapter 3    Methods of Enquiry

## 3.1 Context

### 3.1.1   Introduction

This chapter outlines and details the methodology used in this research. Beginning with an overview of research approaches in this field, this chapter will then go on to focus on the most appropriate methodology and methods for the research aim and objectives. A justification for the chosen methodology will be presented. The ethical considerations and justifications will be summarised before concluding with the next steps and programme of fieldwork. The final part of the chapter consists of an overview of the analytical procedures used post-fieldwork and the coding structures used to sort and analyse the empirical findings from the field. The chapter sets the scene for the ensuing empirical material to follow in chapters four to seven, and provides the reader with a clear synopsis of the research procedure. Additional material pertaining to fieldwork and analysis can be found in the appendix pages and are referenced where appropriate.

This study makes use of case studies of outdoor learning at two specific sites, in order to explore in depth the experiences of students learning in residential locations with a focus on outdoor and environmental education. Making use of qualitative approaches including semi-structured interviews, focus groups, photo elicitation and participant observation, the work will focus upon two cases: Embercombe, a land based learning charity South of Exeter, South Devon; and Slapton Ley, a field studies centre within the Field Studies Council's network, also in South Devon. The case locations are detailed and described later in this chapter.

### 3.1.2   Aim

This study focuses specifically on outdoor and environmental learning in a residential context with secondary school students in the UK. The research aims to explore the extent to which current educational practices, structures and pedagogies in two case study locations can be said to occur as continuous lived experiences; invoking relational ontologies. Furthermore, this research examines the environmental encounters of students and considers how these encounters shape and challenge environmental narratives consisting social and cultural norms. Beyond the described and explored encounters of students, this

research looks too at the possibilities for outdoor environmental education to turn to relational ethics in order to understand the role of broader experiential encounters in shaping learning for sustainability.

The objectives of this research thus emerge from the tensions and debates which exist within environmental education and sustainability education, and offers a possibility of bringing historically divergent positions into conversation with one another. This 'blended position' presents itself as an opportunity to understand residential experiences beyond the transmissive/transformative divide and instead looks to the wider experiential basis which these places and experiences offer.

### 3.1.3  Objectives

3) To *describe* the environmental encounters of students in residential outdoor environmental settings.

4) To *consider* the ways in which these encounters might challenge environmental narratives and social norms.

3a)  To *explore* the extent to which student experiences of residential outdoor environmental education can be said to invoke relational ontologies.

3b) To *suggest* ways in which residential outdoor environmental education might become more responsive toward relational ontologies.

### 3.1.4  Epistemological boundaries

It is necessary to determine the epistemological boundaries within which this research resides. Much work concerned with sustainability and education, as well as outdoor learning, has sought to define the attributes and particularities of experience, and as such, concepts such as attitude, values and behaviours have progressively been explored as indicators of successful programmes. Often the focus of this research is rationalistic and objective, and seeks to provide deterministic answers to the question of behaviour and practices emerging as a result of environmental or sustainability education. Without wishing to contest the worth of these approaches, from the outset it is necessary to be clear that the construct of sustainability as an ethic or 'frame of mind' underpinning discourse and practices in the context of place and community is overtly subjective. It is also relativistic, emerging from a constructivist epistemology. Additionally,

environmental narratives and encounters are positioned in the case of this research within the bounds of a relational and interpersonal ontology, and as such finds dissonance with the focus that many objective enquiries place upon the individual (Popke, 2006, Russell and Bell, 1996, Tronto, 1993). From this theoretical position, the enquiry becomes grounded in the domain of subjective and interpretive research techniques.

Additionally, the methodology proposed in this chapter has been designed to meet the research aim and objectives. Where necessary, the research approach is linked to specific facets of this enquiry in order to explain the chosen approach. However, before focusing upon the two-site ethnographic case study, some space is given to reviewing and commenting on the aforementioned quantitative set of approaches used in environmental and sustainability education research. This demonstrates the breadth of approaches used in the field. Moreover, it evidences the decision to make use of a qualitative approach within this study.

## 3.2 Overview of methodological approaches

The literature related to outdoor environmental education and behaviour change is rich and diverse, from philosophical and ethical approaches to thinking about learning in the outdoors, to pedagogical approaches and mechanisms for provoking deeper engagement with nature. Here, educational literature meets behaviour change in sociological and psychological territory where many approaches have been developed for both encouraging this type of engagement, as well as measuring the efficacy of educational programmes. This section gives an overview of this field and its methodologies, which mostly emerge from the quantitative sciences. Furthermore, it is necessary to look at other fields of research. While the particular topic of interest to this study is environmental education and outdoor learning, it is necessary to take a broader view of the field of sustainability and behaviour change in order to understand how environmental attitudes, beliefs and values have been measured.

Perhaps one of the most widely-recognised and applied methods of measuring environmental attitudes was put forward by Dunlap in 1978 (Dunlap and Van Liere, 1978), known as the 'New Ecological Paradigm (NEP) Scale', designed to appraise the attitude of adults toward the environment. This is based upon the premise that a new and unidentified worldview was emerging. This worldview ran counter to, and challenged, the 'Dominant Social Paradigm'. The scale consists

of 12 questions which test opinions on a range of environmental issues, offering answers on a Likert scale ranging from 'strongly agree' to 'strongly disagree'. The original NEP scale was tested on two groups. The first group was made up of the general public, while the second was selected exclusively from environmental organisations. Since its original conception, the scale has been used in multiple contexts and settings (e.g. Dunlap, 2008, Schultz and Zelezny, 1999), and is often used by psychologists for statistical analysis. The NEP scale has been criticised, including for its strong focus on cognitive testing which appeared to marginalise the affective or emotional aspect of experience of the natural world (Mayer and Frantz, 2004). Furthermore, the NEP scale has been criticised from an environmental-ethical point of view, for failing to leave space for 'deep green', intrinsic perspectives, and instead favouring measurement of degrees of anthropocentrism (Lundmark, 2007). Work has been done recently to update the NEP scale, adding further questions and making use of sub-categories which reflect current environmental concerns (Dunlap et al., 2000), as well as to adapt the scale for use with children (Kopnina, 2012b). The NEP scale has been noted to be consistent with other models and has been tested for its validity, but the degree to which it can be used across cultural contexts has been questioned (Lundmark, 2007).

Other similar studies have focused on the evaluation of environmental concerns and the inclusion of self as a part of nature (Schultz, 2001), and the relationship between humans and the environment (Dutcher et al., 2007). Building upon previous psychological methodologies (e.g. Ajzen, 1991, Kollmuss and Agyeman, 2002), a recent study examines the mediating role of emotions in triggering pro-environmental behaviour (Carmi et al., 2015). This is similar to the work of Maloney and Ward (1973), which also forwarded a comprehensive scale attempting to link environmental knowledge, attitude and action with emotional orientation related to the subject.

These scales and models use an objective approach and predominantly utilise quantitative modes of analysis. It has recently been noted that little has been added to this area from a qualitative position (Kopnina, 2013). Moreover, none of the above scales explicitly deal with the so-called 'anthropocentric – ecocentric' ethics debate, or the subject of intrinsic and instrumental valuing of the environment (discussed in chapter two). An exception to this is the 'Ecocentric

and Anthropocentric Attitudes toward the Environment (EAATE) Scale' developed by Thompson and Barton (Thompson and Barton, 1994), which contained 33 statements which participants are asked to agree or disagree with. The subcategories used within this scale include statements of an anthropocentric nature, statements of an ecocentric nature, and statements which are apathetic towards the environment. Shortcomings of this scale have been addressed by Kopnina (Kopnina, 2013), who suggests that a number of the statements contain cognitive aspects, which pertain to a testing of knowledge rather than value positions, and others which are subject to interpretation as both ecocentric and anthropocentric. Following a comprehensive review, evaluation and re-visioning, Kopnina developed an updated version of the scale consisting of 22 statements with the same three subcategories (Kopnina, 2013). Kopnina stresses that the scale needs more testing, emphasising that the objective nature of such scales should never be taken for granted and should be supplemented with adequate qualitative analysis such as interviews and focus groups. Another criticism of scales assessing environmental outlooks is that they attempt to assess dualistic and normative positions on the environment, rather than enabling more subjective pluralities to emerge from analysis. Lundmark (2007) has argued that the NEP scale falls into this trap of separating values into two distinct positions, and is flawed as it inadequately captures the full spectrum of environmental-ethical positions one may take, sometimes simultaneously.

As the previous section has highlighted, there are a multitude of possible approaches used by sociologists, geographers and psychologists to measure behavioural intentions, beliefs and values as a result of contact with nature. Additionally, these approaches vary with discipline, with many psychological and sociological approaches relying heavily on quantitative enquiry. Responding to Kopnina's call to additionally examine the qualitative aspects of subjective experience, and considering the aforementioned ontological and epistemological basis for this research, this chapter will now depart from these objective scale-based measures and turn instead to methodologies suited to inductive enquiry. As the chapter moves from quantitative to qualitative approaches, the emphasis now changes from 'what can be known' to 'what can be inferred', and therefore shifts from a conceptual grounding in variables to a differing set of ways of thinking about social reality (Punch, 2009).

## 3.3 Ethnographic case study approach

Broadly, ethnography is defined as "the art and science of describing a human group – its institutions, interpersonal behaviours, material productions and beliefs" (Angrosino, 2007 p.14). Its methods are based on field observations – normally immersive as a 'participant observer' and over long timeframes. Punch (2009) comments that whist distinctive in their own right, ethnographic approaches overlap and fuse with other modes of enquiry. This trait gives ethnographic researchers a large degree of flexibility to incorporate a wide variety of methods and approaches specific to the research situation. Maggs-Rapport (2000) notes that the ethnographer focuses on the cultural manifestation of meaning, and is empowered to uncover 'hidden' meaning by interpreting the experiences of participants. Rather than making use of deductive enquiry, ethnographers use descriptive and inductive enquiry to build a picture or a story over time, rather than to test ideas in the field (Hay, 2000). These ideas can then be 'spoken back' to the researcher by those under study during the fieldwork itself, and in this way theories and concepts become emergent aspects of field-based enquiry. Ethnographic research is said to be holistic, preferring to view the full picture of community rather than to concentrate on small details of individual's behaviour (Angrosino, 2007).

Specifically, this research will make use of an ethnographic case study approach to uncover environmental discourses and practices within residential learning settings. This section outlines the case study approach in light of this research and justifies the chosen methodology. It will consider the focus of the approach, interpretation of field data, and use of triangulation to consolidate findings.

Case studies have been traditionally used in education as a way of understanding a specific case as a bounded entity of its own (see: Merriam, 1988). The case may be a person, an educational programme, a place or an entire institution. Within these cases a series of processes, experiences and events play out (Stake, 1995). Hamilton (2011) notes that a case study typically concentrates on "a bounded unit which is examined, observed, described and analysed in order to capture key components of the case" (p.2). While the exact nature of each approach is determined by the setting and context in which the study evolves, case studies are interested in generating as full a picture of the case as possible (Punch, 2009). Individual cases are often described as 'unique' and not

representative of the population. Indeed, one of the most frequently cited criticisms of case study research is that they cannot generalise, and are therefore of limited use (Stake, 1995, Punch, 2009). However, case workers defend this assertion and make the point that their focus upon the detail and uniqueness of the case is instead their strength, although generalisations might be out of the reach of case-based research, the process of wider interpretation remains at the heart of this approach. Flyvberg (2006) has been especially sharp in defending the case study approach and asserts that context-based knowledge is valuable, as universal theories are of limited use on their own. Interpretation is a key concept of all research, but becomes especially important in case study approaches as the researcher acts as interpreter in the field and might even be seen as an embodied sensory ethnographic tool of research, first objectively observing and recording the case and later refining and reflecting upon those observations (Crang and Cook, 2007). The case study approach in education has an established basis within the subjective, ethnographic and participation-focused fieldwork (e.g. Paisley et al., 2008, Davidson, 2001). The usefulness of a case study methodology is clear, according to Punch (2009), although he concludes that the approach is best used when well integrated with others and not only a descriptive, fact-based outcome resulting from the enquiry. The priority will be to carefully design the research in order to effectively apply the case study approach to the aim and objectives of the study, and to use the range of available methods to best effect.

Case studies often make use of multiple perspectives within one case, and may include multiple cases. In a process known as 'triangulation', assumptions about the data are validated by checking them against a range of other sources. These sources might be from different methodological approaches, and might include validating findings across cases and settings. This project will make use of two educational settings, representing between them a wide breadth of pedagogical and experiential approaches, while additionally making use of four distinct methods: semi-structured interviews, participant observations, focus groups and photo elicitation. Additionally, the richness of these findings will be augmented by reflections on researcher-led teaching practice.

As suggested by Hamilton (2011), once the issue, research aim and objectives have been established, it must be determined whether the focus of the case study

will be holistic or instrumental. Holistic cases are established on the basis that the interest is in the case itself, rather than a particular facet or component of that case. Studying an intrinsic or holistic case gives us an understanding of the case as a whole existing entity. An instrumental case study gives focus on a particular aspect of the case in order to understand something other than the case itself (Stake, 1995). In the example of this research, the consideration of environmental encounters in a residential/outdoor learning setting seeks to enable understanding of an aspect of education other the case itself. This study therefore makes use of an instrumental focus in methodological terms. This is not to be confused with the previously mentioned term in an educational philosophy context.

The case studies to be used in this research are bounded by their site-specific and organisational identity and are instrumental in approach in order to elicit the ways in which residential learning experiences are informed by ecological encounters and how these experiences translate into socio-environmental discourses and practices. The next section will explore this methodology in more detail and focus on details of the cases themselves.

## 3.4 Case study locations

This research will focus upon two location based case-studies: Embercombe (EC) and Slapton Ley Field Centre (SLFC). Both are described in this section. Within the context of these settings, this research will use a select set of methods to explore the research aim and objectives. Furthermore, this section will make a case for each of these methods, connecting them with the objectives of the study. Finally, the ethical dimensions of the fieldwork will be covered as well as the author's positionality as a component of this research. A map of the case study locations in South Devon can be found in Chapter 1.

### 3.4.1.1 Embercombe

Embercombe is a land-based learning charity, 20 miles south of Exeter in South Devon, UK. Established in 1999, Embercombe's mission is to inspire people "to take courageous action for a just, peaceful and sustainable world… where all people live in communities that care for each other, who are connected to nature and enable each member to lead an empowered, fulfilling life" (Embercombe, 2016a). Embercombe offers residential courses and opportunities to children and adults in environmental leadership and social development, and works with

schools to support curriculum based learning in outdoor settings as well as part of its outreach projects. Embercombe is grounded on the following principles: the children's fire (any action should not harm a child seven generations from now), the twin trails (the coexistence of the inner self with outer action), connection, sustainability and community (Embercombe, 2016b). Embercombe caters for visiting groups and provides accommodation in the form of on-site yurts.

### 3.4.1.2    Slapton Ley Field Centre

Slapton Ley Field Centre is a residential learning centre and is part of the Field Studies Council's network of similar centres across the UK. The centre is located on the south coast of Devon in the village of Slapton, in the area known as Start Bay. It is located next to Slapton Ley National Nature Reserve and helps to manage this area on behalf of the Whitley Wildlife Conservation Trust (SLFC, 2016). The field centre's main function is to provide residential learning field trips to schools and universities throughout the year. The visits are mostly from school students between the ages of 15 and 18. These visits are focused predominantly on carrying out field work in line with exam specifications for GCSE, IB and A level qualifications. Most teaching is carried out by field centre staff known as tutors. All catering and accommodation is provided for visiting school groups, many of whom have been visiting Slapton annually for years. Teaching days typically finish at 8pm in the evening. Most groups stay between three and five days.
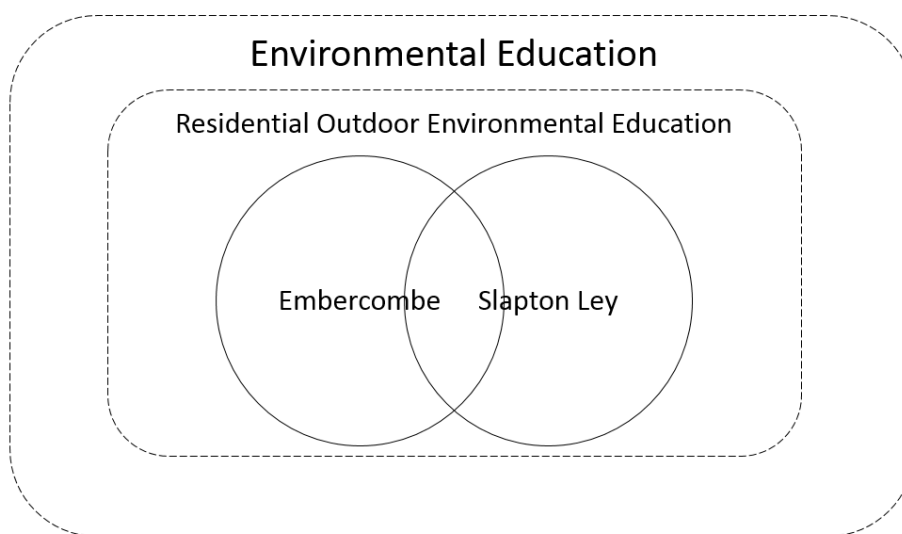


*Figure 3.1 Case studies as bounded entities, within the wider context of outdoor learning and environmental education*

### 3.4.2 Justifying the case studies

The cases for this research have been chosen as a result of applicability and practicality. Firstly, both cases are based in South Devon, with rough equidistance from the home of the researcher, enabling easy access to both locations. Secondly, the two sites represent distinct approaches to environmental education which enable wide-ranging understandings and interpretations of environmental experiences within an outdoor learning context. While both locations are familiar to one another and have their roots in outdoor and environmental education with schools, they vary in their strategies, ethos and approaches. In table 3.1 below, some assumptions about the ways in which they differ are demonstrated. SLFC focuses predominantly on the intersection between assessment (GCSE and A level mostly) and outdoor, contextual experiences. The methodology employed is transmissive, in order to encourage the accumulation of instrumental knowledge and skills to pass curriculum-based assessments. Embercombe bases itself on a holistic approach to learning in which experiences are the basis for personal transformation. At Embercombe, the emphasis is not predominantly on curriculum based assessment (although the activities which young people take part in are highlighted as connected with potential curriculum links, they are not explicit). Another area of difference observed here is that sustainability and ecological education are central to the Embercombe approach and philosophy, while it can be said to be incidental to the philosophy of Slapton. Finally, as observed by a member of Embercombe staff on a preliminary site visit, the two cases differ in terms of their physical learning catchment – while Embercombe activities are, for the most part, based at the institution, Slapton's learning catchment is based at a variety of 'field sites', up to 40 miles away.

These similarities and differences in philosophical and pedagogical approach present a clear rationale for exploring the research question in both settings. Slapton and Embercombe present considerably different approaches to environmental education (and in turn, education – see figure 3.1), and might be considered as examples of transmissive and transformative paradigms within education (Sterling, 2001). However, such an observation, although helpful for articulating the rationale behind deciding upon these cases, perhaps oversimplifies the situation and does not, on its own, pose an acceptable starting

point for entering the field. While the two cases may be different in approach and ethos, they also resemble one another in many ways, and the different paradigms which they appear to represent may prove to be a misrepresentation.

| Embercombe | Slapton Ley Field Centre |
|---|---|
| Holistic / emancipatory | Outcome driven / instrumental |
| Transformative | Transmissive |
| Experience-focused | Knowledge / Skills-focused |
| Majority of time spent at single site | Multiple and disparate field sites utilised |
| Extra-curricular | Curricular |
| Sustainability education is central | Sustainability education is incidental |

**Table 3.1** *Case study differences (author compiled).*

### 3.4.3   Access to case studies

Groups used in this research were approached through a strict staged format (see figure 3.2), which initially involved the case study organisation approving work with a particular group. This stage was particularly important as the case locations held a greater understanding of the particularities of groups. Early discussions with the education team at each case location disclosed a variety of reasons why some groups were 'off limits'. These reasons included Quality Badge Assessment (the FSC's equivalent to Ofsted inspections) taking place, and the desire not to put additional pressure of observation on tutors, as well as logistical issues such as limits to the number of people who could travel on allocated transport. At Embercombe, it was important that a gender balance was struck on each programme, so on some occasions it was not appropriate for the researcher to take part when there were already a number of male adults working.

In the next phase, liaison with tutors enabled initial contact with the visiting school group to seek permission to proceed with the planned research. Introductions to school groups by email via the case location as a 'go-between' (Fetterman, 2010)

enabled a more professional, trusting and smoother working relationship with research participants. Once permission had been established with the visiting group, the group teacher ensured that students and their parents/guardians were aware of the presence of a researcher on the trip (a briefing was sent to the teacher via email to pass on – see appendices). Finally, details of engagement such as timings of focus groups and introductions were confirmed with the residential centre tutor/facilitator prior to the group's arrival.

```
┌──────────────────┐      ┌──────────────────┐      ┌──────────────────┐
│      Initial     │      │  Identification of│      │ Contact with groups│
│ communication with│ ──> │ suitable groups to│ ──> │ prior to visit to seek│
│ case location / staff│   │ work with at case │      │   agreement to    │
│                  │      │        site       │      │    participate    │
└──────────────────┘      └──────────────────┘      └──────────────────┘
         │
         ▼
┌──────────────────┐      ┌──────────────────┐      ┌──────────────────┐
│ Arrival of group to│     │                  │      │ Debrief group and │
│  case location.   │ ──> │    Carry out     │ ──> │   carry out post  │
│ Briefing group about│    │ observations / focus│    │ research appraisal │
│     research      │     │ groups / interviews│     │ with location staff│
└──────────────────┘      └──────────────────┘      └──────────────────┘
```

*Figure 3.2* *Staged approach to engaging with research settings.*

### 3.4.4   Researcher positionality

As the researcher has worked in the field of environmental education prior to the PhD, five of which have been at SLFC, it is important to mention something of the research positionality here and how it is understood to influence and impact upon the ethnographic case studies undertaken. Positionality has been given attention in large part by feminist and critical scholars (e.g. Rose, 1997, Martin and Van Gunten, 2002) who have deemed it necessary to become mindful of their impact on research participants and to become accountable for these impacts. This has been postulated in terms of race and cultural relations (Milner, 2007), asymmetrical power dynamics in research and academia (Sidaway, 2000), as well as within education research with children (Barker and Smith, 2001). These commentators point out that the objective, detached framework which some academics approach the field is impossible to achieve, and indeed

not desirable. Katz (1994) makes use of the term 'fields of power' to bring our attention to the multiple ways in which researchers interact within power relations when carrying out fieldwork. In this way, the visiting researcher brings with them a differentiated set of meanings and significances which are attached to the very essence of their being and doing. The goal therefore is not to cover these traits and tracks but to bring mindful awareness to their being there and to understand the ways in which they will affect the researched community and the research itself. Rose (1997) advocates the use of reflexivity in research practice, creating "introspective aspects of thought that are self-critical and self-consciously analytical" (p.309). In this way, the research becomes a site of interest, change and insight, and produces a 'transparent self' who not only looks inward, but also outward to their position in the world and amongst relations of power and influence (Rose, 1997). This research brings to the surface a number of points of positionality:

1. The researcher holds familiarity with, and friendships within, the researched community, having lived at Slapton for a number of years. While this has arguably enabled easier access to the field and creates a larger sense of transparency for the researched community, it also places the researcher in an ambiguous role.

2. The researcher has previously provided training on learning for sustainability outdoor learning whilst working for the FSC. This has the potential to skew observation of taught sessions. This was exemplified when one participant field tutor asked "would you like me to put more of that stuff [sustainability 'related' material] in then, if that's what you're interested in?" (Journal notes).

3. The way in which the researcher responds to dynamic teaching situations (especially in the field), such as the use of equipment, health and safety and student behaviour is a component of their positionality requiring a degree of brokering with field centre staff before entering the field.

4. The dual case study setting might create feelings of comparison and criticality within researched communities. This is linked to point 2 above, where the aims of the research are known to participants.

By bringing awareness and self-conscious analysis to these aspects of positionality, both within the researcher's own self and within the participant

community, the researcher will be enabled to proceed with cautious awareness of these relations. Furthermore, becoming aware of positionalities of research raises the opportunity to co-construct the format and understanding of these engagements with research participants dialogically (England, 1994).

## 3.5 Field methods

The methods used in this study focus on observational and interview-based approaches across the two case study locations and were carried out in phases linked to residential visits. These research phases lasted between one week and one month and occurred over a period of 11 months (see section 3.5.6). In line with Stake's assertion that "there is no particular moment when data gathering begins" (Stake, 1995 p.49), the enquiry was shaped and developed many months before entering the field. Preliminary discussions with 'gatekeeper' representatives of each organisation began six months prior to fieldwork commencing, and personal (and professional) experiences at both sites developed an appreciation of the type of enquiry which might develop. Additionally, available organisational literature, acquired both online and by request, informed the research process prior to developing the precise methodology. Although the case location itself is defined as an entity for the purposes of the chosen methodology, the exact moment when data collection begins or ends is not bound to time in the field. However, the employed modes of field-based research only took place once the researcher entered the field in such a capacity. It is these methods which this section will now describe and justify.

| Prior to group visit | During group visit | After group visit |
|---|---|---|
| **Agree research parameters**, focus, timings, researcher position, **roles and format of observations** with field tutor/facilitator. | **Brief group** on arrival about research – discuss research focus and **ethics**. | Conduct **focus group discussion** and **photo elicitation** with volunteer students. |
| | Ask for **volunteers for focus group** and brief at end of first day (or another suitable time) regarding photo elicitation. | Thank the group for their time, **debrief** and remind about **ethical considerations** of the work. |
| **Send research proposal** and agreement to visiting staff and **agree participation**. | Enrol as a **participant observer** for the duration of the course. Make use of **reflexive self-analysis** to change and adopt differentiated roles based on power dynamics (Rose, 1997). | **Email visiting teacher** to thank them for their time and participation. |
| **Discuss and agree** on suggested time for briefing/focus group to occur. | Make **brief notes** during the day and take opportunities in the evenings/at lunch to **write up** more fully. Keep a **reflective diary** of field experiences from a researcher/self-perspective. | Conduct post-group visit **semi-structured interviews** with tutor/facilitator of group and/or **reflect /debrief** from the course. |
| | | Ensure notes are up-to-date and complete. **Transcribe** interviews. **Reflect** on experience. |

*Figure 3.3* *Research plan for individual group visits – specific actions in bold.*

### 3.5.1   Participant observation

Participant observation offers opportunity for a 'practice of discovery' (Denzin and Lincoln, 2011 p. 126) and an immersive understanding of the lived experience of participants, which includes the researchers own responses. This permits emotional reflection as a legitimate aspect of research design. Participation requires detailed observation and note taking, whereby all accounts and experiences are legitimate data, often recorded using field notes, sketches, film and audio formats (Madden, 2010). The descriptive accounts which emerge create a holistic picture of interaction, culture and community life. Participation "implies an immersion of the researcher's self into the everyday rhythms and routines of the community" (Crang and Cook, 2007 p.37). This presents great opportunities, but also ethical issues relating to the depth of responsibility and interaction, which will be returned to later in this chapter. Participation and

observation for this study entailed detailed note-taking and recording of learning experiences, both as they occurred and in subsequent reflection following each fieldwork day. Due to the social nature of the study this involved a careful process of note taking, reflection and analysis, both in the field and as an aspect of on-site follow up (Angrosino, 2007). The role of participant observation in this study is to provide first insight and develop "a geography of everyday experience" (Kearns, 2010 p.245) as well as to share those experiences with participants of the research by placing oneself within the situation under study. A potential problem with participant observation is the way in which it potentially alters the behaviour of those being observed; as suggested by Kearns (2010), "there is no such thing as a non-participant in a social situation" (p.246). While the boundaries between observer and participant remain unclear and a matter of situation and position, it is necessary to become aware of the role positionality plays in setting foot into a research setting (see section 3.4.4 on positionality of researcher).

For this research, observational approaches are employed in order to interpret meaning from field-based learning experiences as they take place within each case study setting. Used alongside the remaining methods to be covered by this chapter, participant observation enables triangulation of research findings and assertions. Kearns (2010) suggests a series of distinct stages which the participant-observer should negotiate in order to fulfil satisfactory research. Beginning with access to the site, this should then lead to preliminary discussions on field relations and the establishment of appropriate rapport, then the degree to which the researcher takes part with participants activities should be negotiated, followed by recording of field data 'homework' and finally analysis and ethical obligations (Kearns, 2010). Observation is used as the preliminary and predominant research method in this enquiry. It is both influenced by, and will in turn influence, the context in which it takes place. Participant observation, while speaking to all three objectives, specifically connects with objectives one and two (see section 3.1.3).

### 3.5.2  Focus groups

Focus groups have been noted for their flexibility and their ability to get to the heart of the research matter. In Hay's terms; they help researchers to understand not only what people do, but also why people think and behave in a certain way

(Hay, 2000). Their flexibility as a research tool to be combined with other approaches has also been noted.

Additionally, focus groups have been demonstrated to be an appropriate research approach for acquiring information from participants who would otherwise not engage in other settings, such as interviews. Because of their flexibility in allowing participants to engage in dialogue with their peer groups in a relaxed setting, permitting anecdotes, jokes and discussion, Kitzinger (1995) notes that focus groups provide powerful forums for understanding people's knowledge and attitudes without the need for reasoned responses to direct questions. Alternately, Phillips and Johns (2012) observe that focus groups can be limited by their collective nature, as some topics are too sensitive for group discussion and are more likely to come up in one-to-one conversation, or not at all. As Morgan (1997) notes, this is as much an ethical as a practical issue when participants are asked to disclose personal information in a group setting. The ethical case for proceeding with fieldwork and for adhering to careful procedure will be covered later in this chapter.

The focus group is used in this study in order to address objectives 2 and 3a: the ways in which environmental encounters might challenge or construct narratives and social norms, and the extent to which student experiences of residential outdoor environmental education can be said to invoke relational understandings. However, this approach additionally connects to objective 3b, as the group discussion enables an examination of how educational approaches might change and respond to the experiences of the students. More broadly, focus groups have been chosen for their ability to allow an exploration of people-place relationships (Hay, 2000), as well as to provide a mode of triangulation or 'validation' of observational data (Phillips and Johns, 2012) and therefore lend interpretive robustness to the study.

Focus groups were coordinated once the groups arrived at the residential centre, with volunteers being asked to take part. As a rule of thumb, the researcher suggested between 4 to 6 participants per research group (average group size ~17 at Slapton and ~25 at Embercombe), and met initially with volunteers at the start of the course (typically on the first evening) to discuss their involvement in group discussions. The details of photo elicitation [used only at Slapton] were made clear to participants (see section 3.5.3) in this first meeting and the group

then met again at the end of the course to discuss their experiences. The focus groups generally lasted between 30-40 minutes and were held in a mutually agreed space. At Slapton this was normally a front sitting room / waiting area, while at Embercombe it was in the education team office, or occasionally outside. The focus group adhered to a limited structure and a set of guiding questions were prepared prior to meeting (see appendices).

In accordance with Morgan (1997) the compromise between structured questioning of participants and a relatively open format allows group discussion to occur unhindered (structured by photo elicitation), while some level of comparability should be able to be made between focus group data. Some questions were planned in advance and related to the research objectives, while others emerged from observational enquiry throughout the course. Following the focus group, participants were thanked for their time and reminded about their ethical rights to withdraw from the research at any time (see table 3.2).

### 3.5.3 Photo elicitation

Photos have a significant association with ethnographic and case study research, both as a method of data capture by the researcher, and as a method of communication between the researcher and the participant. In the case of this research, photo elicitation refers to the use of photographs in focus group settings, as symbolic representation of expression (Harper, 2002). Pink (2013) also describes how visual images can be made meaningful through the subjective interpretation of informants or participants; "photographic interviews can allow ethnographers and informants to discuss images in ways that create a 'bridge' between their different experiences of reality" (Pink, 2013 p.84). The suggestion is that photographs can be used as anchors for experiences, rather than as purely objective data. While the photographs generated might provide an interesting insight in themselves to the experiences and practices of participants (e.g. Harman and Cappellini, 2015), often the photographs can be seen as a technique for eliciting conversational information from participants, as well as providing a focus and structure to the discussions (Smith et al., 2010). In some cases, photographs which have been participant-generated have been made a focus of the research. For example, Loeffler (2004a) has demonstrated how photographs can be coded and then analysed using inductive thematic analysis. Photographs have also been used more directly to enable representation and empowerment

of participants otherwise marginalised in political and cultural settings. Photovoice was pioneered in participatory methodologies for needs assessment in the context of women's health research (Wang and Burris, 1997). Making use of photographs taken by participants, the method aims to record concerns of the community, to promote critical dialogue and to effect policy (Wang, 1999).

The way in which photographs are used in a focus group setting is determined by the facets of the enquiry. The use of photo elicitation in this enquiry is aimed at providing a discussion waypoint for navigating the complexities of the subject matter (socio-environmental relational practices and discourses associated with field-based learning – i.e. objective 3), and the photographs themselves are seen in this context to hold meaning when interpreted through participants own narrative.

In this research, volunteer participants at Slapton taking part in focus groups (see section 3.5.2 on focus groups for selection process) were tasked at the beginning of the residential stay with taking photographs which express for them their experiences of fieldwork. This approach has a precedent in Loeffer's (2004b) work with university students, used to uncover the meanings of outdoor experiences. This study borrows from Loeffer's work in that the photos were participant-generated, but differs in that the researcher accompanied the students throughout the experience which was then later discussed.

Prior to the focus group, students were asked to select one photo each to discuss, and then emailed or uploaded their photo onto a laptop. The photograph was used in order to provoke discussion and participants were asked to talk about their experiences of fieldwork, specifically beginning with questions pertaining to their photograph (see questions below). Each was given the chance to say why they chose their photograph(s) and other participants were then encouraged to join the discussion. In this way, the discussion was largely led by participants, although the researcher was prepared with open, semi-structured questions for guiding the discussion (NB: not all of these were required in each focus group, nor is the list exhaustive):

In relation to the participant-generated photograph:

- *What is your photograph of?*
- *Why did you decide to bring this photograph to discuss?*
- *What does this photograph say about your experiences today/this week/weekend/here?*

In general:

- *How would you describe to others that weren't on this trip your experiences here?*
- *What do you think will be your strongest memories from this trip?*
- *How will you remember this trip? What stories will you tell in one year/five years / twenty years?*
- *Why did you come on this trip?*
- *Would you like to add anything else?*

It is necessary to note, that while photo elicitation was used at Slapton, it was not possible to make use of this technique at Embercombe due to the specificities of the setting and the culture surrounding the regular use of cameras. This limitation has been detailed further in section 8.4. While student discussion on the photos was made use of for empirical analysis, the photos themselves simply served to elicit this discussion, and were not themselves subject to forms of visual analysis. A photo essay presenting the photos taken by students at Slapton along with accompanying discussion is provided in the appendices.

### 3.5.4   Interviews

Hay (2000) notes that researchers may choose to make use of interview-based methods for the following reasons: to fill a gap in knowledge otherwise unobtainable by other methods, to investigate complex behaviours, to collect a range of opinions and meanings, to reveal agreement, and to provide empowerment to the informants through a deeper appreciation of the issues under investigation. For all of these reasons, this research might make a case for using interview methods. However, of particular interest here is the first and second point. Unstructured or semi-structured interviews allow for an open response as well as flexibility in terms of the questions to be asked. The process of triangulation is especially important here as interviews add a layer of personal detail which other methods are unable to obtain, thereby fortifying or in some

cases rebuking the assumptions emerging from observational field methods (Madden, 2010). Valentine (1997) notes that semi-structured interviews have the benefit of enabling the participant/informant to raise issues or cover ground which has not been foreseen by the researcher. Interviews are fluid enough for conversations to become far more wide ranging than a questionnaire would allow while retaining a sense of direction pertaining to the research aims (Bryman, 2003).

A semi-structured, open-ended interview-based method of enquiry permits the collection of detailed information pertaining to the study and offers opportunities for speaking to key informant groups regarding their views and opinions on specific topic areas, whilst retaining the opportunity to diverge where necessary. Interviews must be used deliberately and sparingly, for there is a possibility of getting side-tracked (Crang and Cook, 2007) as well as generating a very large amount of data – not all of which will be useful to the enquiry. Hay (2000) suggests that an hour of interview-based discussion takes four hours to transcribe from recording.

In order to illicit the most useful information from the interview, a structured basis was used in order to draw out descriptive, structural and comparative responses (Madden, 2010). An interview schedule was established as a basis for guiding questioning and keeping the interview on track. Interviewees were chosen based upon their potential insights into pedagogies and discourses surrounding field-based learning cultures. Interview participants were selected from groups working within educational field-based settings and most interviewees were visiting teachers and education professionals. While key informant semi-structured interviews were focused predominantly at addressing objective 2; *To consider the ways in which environmental encounters challenge or construct environmental narratives and social norms*, objective 3b will also be addressed by this method; *To suggest ways in which residential outdoor environmental education might become more responsive toward relational ontologies* (see figure 3.4).
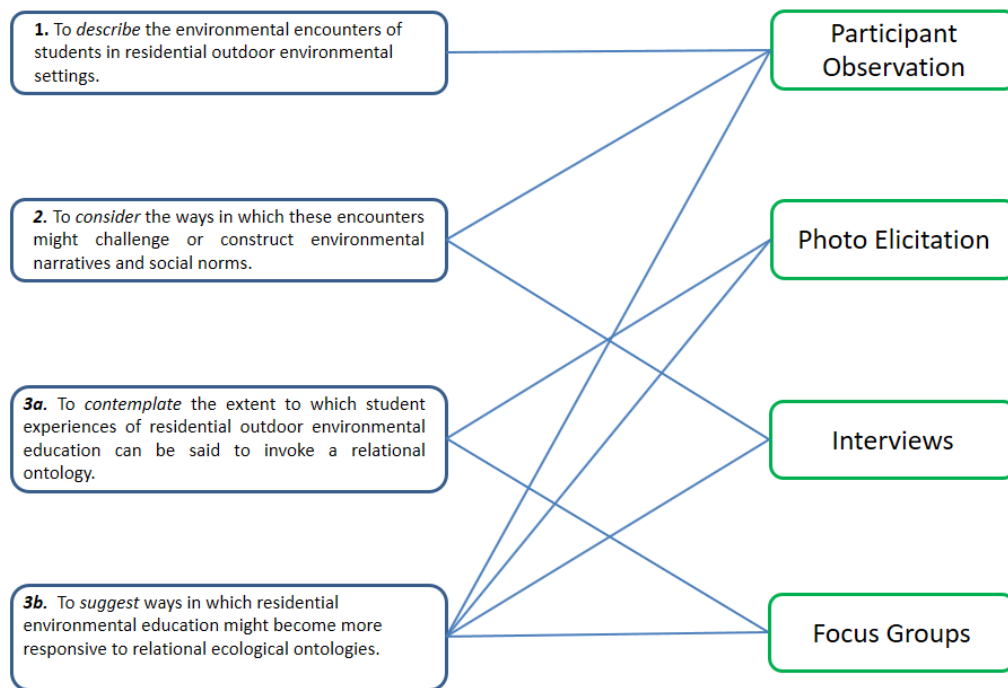
*Figure 3.4* *Connecting objectives with methods.*

### 3.5.5 Research ethics

The role of research ethics is covered in detail by many of the texts which have guided the process of methodology construction for the purpose of this research (Valentine, 1997, Stake, 1995, Punch, 2009, Crang and Cook, 2007, Baxter, 2010). Indeed, ethical considerations play a large part in any research and the institution authorising this study (University of Exeter) has its own strict set of guidelines. Research ethics are broadly set in place to safeguard against harm, including physical, psychological and environmental. However, this basis for carrying out 'harmless' research intersects with the complex arena of positionality, as already covered earlier in this chapter. Many of the issues are similar, specifically concerning interplays of power and subjugation of research participants through both methodological approaches and the researcher's role in the field. This section will inevitably cover some ground already touched upon by positionality, but will focus upon the ethical issues which arise as a result of methodological activities and their management.

The study concerns itself with the lived experience of participants in a community environment where trust must be gained in order to gain access to the field (Madden, 2010). As a precondition of the research, I encountered participants as

a co-participant as well as an observer, as I lived within the setting of the inquiry. This raised questions of 'closeness', and the degree to which gaining trust means taking advantage of friendships (Madden, 2010). Although it has been recognised that friendships in the field are an accepted aspect of ethnographic research, the process must remain transparent for participants and as such I changed my approach and plans to suit those within the community, which will be discussed later in this chapter (Crang and Cook, 2007).

The study is interested in the learning and meaning potential arising from education, and as such works with a variety of age groups, although predominantly with teenagers. Some of the participants were classed as minors (below the age of 16) and therefore care was taken in the development of fieldwork in order to safeguard participants' interests and safety. It is necessary to add at this point that no student-participants were subject to one-to-one interviews, and focus groups took place in groups of three or more with the express permission from the participants and the accompanying staff member with the group.

Furthermore, the study was carefully planned in order to alert groups to my involvement as a researcher, prior to participation and data collection. This was achieved via email or letter correspondence with the responsible member of staff in the first instance (see appendices), and on arrival at the field centre in the second instance. Staff members at the case location were engaged in a similar manner but with the addition of a preliminary two day visit prior to the fieldwork. This served to both familiarise myself with the setting as well as to introduce myself and the objectives of my research to the on-site community (staff, volunteers etc.).

In particular I ensured that all participants knew what the intention of the research was, what would happen with their contributions and the data, the degrees of confidentiality I can offer, what would be required from them, the ways that the research and its findings may affect them, and their options for removing themselves form the enquiry, as recommended by Madden (2010).

The research followed these ethical procedures, which were in turn guided by the procedures of the University of Exeter and the literature relating to ethics and fieldwork. However, the normal practice of obtaining written consent from each

individual prior to their arrival at the residential centre was highly problematic and potentially obstructive to the research process. Rather than operating with a strict opt-in process, I submitted a proposal to the university ethics committee to suggest that participants should instead be made fully aware of the research intentions and given the ability to 'opt-out' should they wish, at any point (see: Skelton, 2008). In this way, and given all the available information regarding the research, participants were enabled to become agents in their own ethical choices and make decisions regarding their involvement. The outcome could therefore be seen to be to empower young people participating in this research as 'active participants' rather than mere objects of study (Bell, 2008). Specifically, it was envisaged that the research would create the following ethical dilemmas and subsequent management strategies:

| Group | Form of communication | Type of consent sought and from whom | Response route and subsequent researcher action |
|---|---|---|---|
| Residential Centre | Letter from researcher two months prior to research. | Written consent required from head of residential centre/education. | Study will not start until written consent has been obtained by researcher. |
| Schools | Letter from researcher one month prior to research. | Email agreement from group leader/teacher. | Study will not start until written consent has been obtained by researcher. |
| Parents | Email from school to parents with research brief attached. Email written by group leader / teacher. | Parents informed of research intentions and invited to seek clarification and opt out. | Parents will be invited to opt out by contacting school teacher prior to trip. If parents opt out prior to trip, this will be relayed to researcher via teacher/group leader. Opt-out individuals will be identified to researcher by group leader on arrival at residential centre. |
| Residential centre staff | Initial visit to location by researcher. Specific teaching members of staff will be spoken to individually by researcher. | Verbal consent. | Staff will be given the option of taking part, and will be enabled to opt out at any stage. This will be communicated directly with the researcher. Supporting staff will be made aware of research taking place. |

| | | | Both groups will be debriefed as necessary after research has finished and/or after each group departs. |
|---|---|---|---|
| Participants (observation) | Initial discussion with teacher/group leader. Formal introduction to research on arrival at residential centre by researcher. | Verbal consent. | Verbal consent sought for participation and a clear opt out given to group. If members opt out of the enquiry, the researcher will ensure individuals are not subject to questioning, nor invited for participation in focus groups. Participants will be asked for agreement to these terms, and if this is not acceptable, observation will terminate. All participants will be debriefed and thanked at the end of the observation period. |
| Participants for interviews | Prior arrangement via email/phone. Provision of research summary. | Written consent. | Participants will be asked for their written permission to be recorded and for notes to be taken during the interview. They will be reminded that they may opt out at any stage and may withdraw their contributions to the research at any time. |
| Participants for focus groups | Arrangement on arrival at residential centre. | Written consent. required | Participants will be asked for their written permission to be recorded and for notes to be taken during the focus group. They will be reminded that they may opt out at any stage and may withdraw their contributions to the research at any time. In addition, they will be asked for permission to make use of participant generated photographs within the research. |
| Inclusion in photographs | Prior to arrival at the residential centre via teacher/group leader. On arrival at centre verbally. | Verbal opt out. Opportunity to have faces made anonymous. | Participants will be asked for their permission to be included in photos on arrival at the residential centre. |

**Table 3.2** *Ethical principles and procedures for fieldwork*

### 3.5.6   Timetable for fieldwork

Figure 3.5 shows the timetable for engagement with various groups visiting both case locations. Fieldwork took place between February and November 2016, with varying degrees of intensity. Although the timetable shows the groups worked with over this period, there were frequent visits between these times, in order to conduct interviews, carry out discussions or attend meetings. The timetable also demonstrates where each methodology was deployed and with whom, the type of group including curriculum and specification focus where applicable, numbers of students and the duration of their visit.

| Location | Dates (2016) | Length (days) | School Type | National Curriculum Specification | Level | Age Range | No of Students | Subject | Field Methods Deployed | | | | Focus Group Participants |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Focus Group | Teacher Interview | Photo Elicitation | General Photos | |
| Embercombe | 5th - 12th Feb | 7 | State Steiner | Steiner | GCSE | 15 to 16 | 23 | Development and Leadership | | ✓ | | | n/a |
| Slapton | 27th - 1st March | 4 | Comprehensive | Edexcel | AS Level | 16 to 17 | 23 | Geography | ✓ | | ✓ | ✓ | 3 |
| Slapton | 6th - 8th March | 3 | Private School | AQA | AS Level | 16 to 17 | 11 | Geography | ✓ | ✓ | ✓ | ✓ | 6 |
| Slapton | 15th - 17th March | 3 | Private School | AQA | A2 Level | 17 to 18 | 20 | Geography | ✓ | | ✓ | ✓ | 5 |
| Other* | 22nd - 25th March | 4 | University | PGCE | PGCE | Adult | 10 | Initial Teacher Education* | | | | ✓ | n/a |
| Embercombe | 24th - 29th April | 6 | State Steiner | Steiner | Year 8 | 13 to 14 | 25 | Expereintial Science | ✓ | | | | 7 |
| Embercombe | 23-27 May | 5 | Comprehensive | SEND | Year 7 | 11 to 12 | 18 | Development and Leadership | ✓ | | | ✓ | 4 |
| Embercombe | 13-17 June | 5 | Private Steiner | Steiner | Year 8 | 13 to 14 | 25 | Expereintial Science | ✓ | ✓ | | ✓ | 7 |
| Slapton | 20-24 June | 4 | Private School | OCR | AS Level | 16 to 17 | 16 | Biology | ✓ | | ✓ | ✓ | 6 |
| Embercombe | 30th Jun-1st July | 2 | Private Steiner | Steiner | Class 12 | 17 to 18 | 48 | Social Development | ✓ | ✓ | | ✓ | 4 |
| Slapton | 9th - 12th July | 3 | Comprehensive | OCR | AS Level | 16 to 17 | 16 | Biology | ✓ | ✓ | ✓ | ✓ | 7 |
| Slapton | 18th - 20th July | 2 | Private School | OCR | A2 Level | 17 to 18 | 18 | Biology | ✓ | | ✓ | ✓ | 6 |
| Embercombe | 10-21 Oct | 12 | Private Steiner | Steiner | GCSE | 14 to 15 | 27 | Development and Leadership | ✓ | ✓ | | | 7 |
| Embercombe | 13 - 17 Nov | 5 | Comprehensive | SEND | Year 7 | 11 to 12 | 16 | Various | | | | ✓ | 5 |
| Embercombe | 2 - 7 Dec | 5 | Comprehensive | SEND | Year 8 | 13 to 14 | 22 | Various | | ✓ | | ✓ | n/a |

*Did not form part of data collection

**Figure 3.5:** *Fieldwork timetable and group information for 2016*

### 3.6 Data collection

#### 3.6.1 Life in the field

Throughout 2016, fieldwork took place across both case locations, largely determined by the availability and frequency of groups visiting the residential centres. Life in the field was focused, exhilarating, exciting and at times totally exhausting. Long days coupled with extended periods of writing up field notes and processing data elicited from students during focus group discussions were the mainstay of the field work. While at Slapton, the working day of the tutor ended at 8pm after the final teaching session. I would often spend another hour writing notes before the classroom was locked. At Embercombe the days frequently went on until 10:30pm. This meant that my writing-up often ran long into the night – when I would rarely get to bed before midnight. At Embercombe too, finding time to write up my notes and consolidate my work during the day was difficult. This was often done through negotiation with those leading the sessions. On reflection, the reason for this disparity was the extent to which I seemed 'involved' or rather necessary to the running of the course. At Slapton I was certainly seen to be there as a researcher, while at Embercombe the emphasis was upon my involvement as a member of the team – frequently taking on facilitation roles and leading or supporting activities. As a result the need to compromise between full involvement and careful consideration of the work to be done was at the forefront of my mind at Embercombe, while at Slapton, I struggled to break free of the 'distant researcher' perception that I am sure the students had of me. Fetterman (2010) notes this role of ethnographic presence as a mediating factor in explicitly or implicitly affecting the setting in which researcher's work, while Gobo (2008) recognises that observation takes on different forms in a variety of settings depending on the attitudes, values and norms of the community.

#### 3.6.2 Modifications and realisations

Not long into the year of data collection, the distinct differences in the perception of researcher/participant between the two locations had begun to affect the way in which I was able to work in each location. The study design, which aimed to gain a deep perspective of student experiences of the field, needed to be adapted to the circumstances in which I found myself. As previously mentioned, I was predominantly a researcher in my role at Slapton whilst with groups, and a participant – and later a facilitator – in my role at Embercombe. Careful

consideration of this realisation revealed to me that rather than purely a facet of the ways in which these two locations operate, and the pedagogical principles at play (although clearly this was a reason for the disparity), this was a necessity to working alongside the structures and principles of each location. Slapton tutors, although happy to have me with them in the field, did not turn to me regularly for assistance, and on the occasions when I did contribute to the delivery of sessions, I somehow felt I was undermining their 'authority' and professionalism. On the other hand, my presence at Embercombe relied upon my engagement as a full member of the education team, in addition to my role as a researcher. Here, I had to assert my need to carry out research-specific tasks, such as run focus groups, conduct interviews and write up field notes. As a result of these early realisations, a number of modifications were made to the research approach.

Firstly, I quickly abandoned the photo elicitation exercise at Embercombe, as it did not seem appropriate to give out cameras (very few students were using cameras and they had been asked to leave phones at home). Secondly, focus groups at Embercombe were integrated into the activities rather than bolted on at the end of the course. This meant that focus groups often occurred during the day, rather than the evening. They remained optional and included all of the ethical principles of focus groups at Slapton. Finally, I made more frequent use evenings and lunchtimes to write up notes at Embercombe, while at Slapton I had more time to write more full notes in the field.

### 3.6.3 'Writing down' and 'writing up'

The main data collection process throughout the day at both locations consisted of ethnographic field notes. The notes taken during residentials enabled me to capture the essence of the experience as it occurred in the field, while preparing my thoughts ahead of the focus group. The initial notes in both locations varied in detail due to the time available to make them, but consisted of 'writing down' notes – the first of the conscious three stage process. Writing down normally meant the use of short hand, words and phrases, anything important overheard, sketches or small remarks. These brief notes would then be quickly translated into full sentences when the next chance arose – normally after lunch if possible, and always in the evening. This translation into more full prose is known as 'writing up', and comprised the second part of the data collection process for written field notes. The third part of this process is 'writing out' and occurred later

as part of analysis, which is discussed in the following section and covered by Yin (2015).

## 3.7 Data Analysis

### 3.7.1 Transcription and 'writing out'

Following fieldwork, the process of transcription occurred. Vast quantities of data had been collected in the field, and so the choice to transcribe was to be limited to student focus groups only. Personal audio recordings made in the evening and teacher interviews were not initially transcribed, and instead were listened to in order to extrapolate the information required during the empirical analysis and subsequent writing. Transcription was aided by the use of an Olympus foot pedal and Dragon voice recognition software. In total, 575 minutes and 51,798 words of student discussion was transcribed. These discussions form the backbone of the empirical chapters in this thesis. Further to transcription, the field notes and personal observations and reflections which had been 'written up' in the field were to be subjected to the third and final stage of 'writing out'. This process took place very soon after returning from the field, and translated the full but rough notes from the field into easier to read and understand stories. In addition to the focus groups, 43,363 words of notes were compiled throughout work with 11 groups in 2016, bringing the total data gathered to 95,161 words as well as additional non-transcribed interviews and discussions. For the purposes of anonymity, group participants' names have been changed, and school groups have been assigned a code. The codes and names of participants are provided in table 3.3.

| Anonymised Group Codes | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Embercombe | | | | Slapton | | | | | |
| **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** |
| Sonja | Sam | Fred | Ollie | Dan | Lizzy | Cai | Claire | Sammy | Lola |
| Colin | Nicole | Judy | Howard | Zak | Ahmed | Farah | Elena | Connor | Richard |
| Leah | Lilly | Izzy | Jessica | Mohammed | Billy | Polly | Sarah | Shaun | Rich |
| Sandeep | Heidy | Iona | Anna | | Oliver | Sam | Penny | Fay | Rachel |
| | Lester | Calum | Kendal | | Kirsty | Hamid | Celia | Chris | Lauren |
| | Errol | Laura | Ryan | | Mark | | Sadie | Lisa | Sara |
| | Elsie | Simon | Nydia | | Kim | | | | |

**Table 3.3** *Group codes and anonymised participant names*

### 3.7.2 Coding process

The analysis of data followed Yin's (2015) procedure of compiling, disassembling and then reassembling data, using a tiered coding process. Following transcription and writing out of field notes, the data was coded in line with in vivo

techniques, enabling the text to speak for itself (Saldaña, 2015). Printed text was 'tagged' by hand, and margin codes were made which provided a concise reference to the topic under discussion (see figure 3.6).
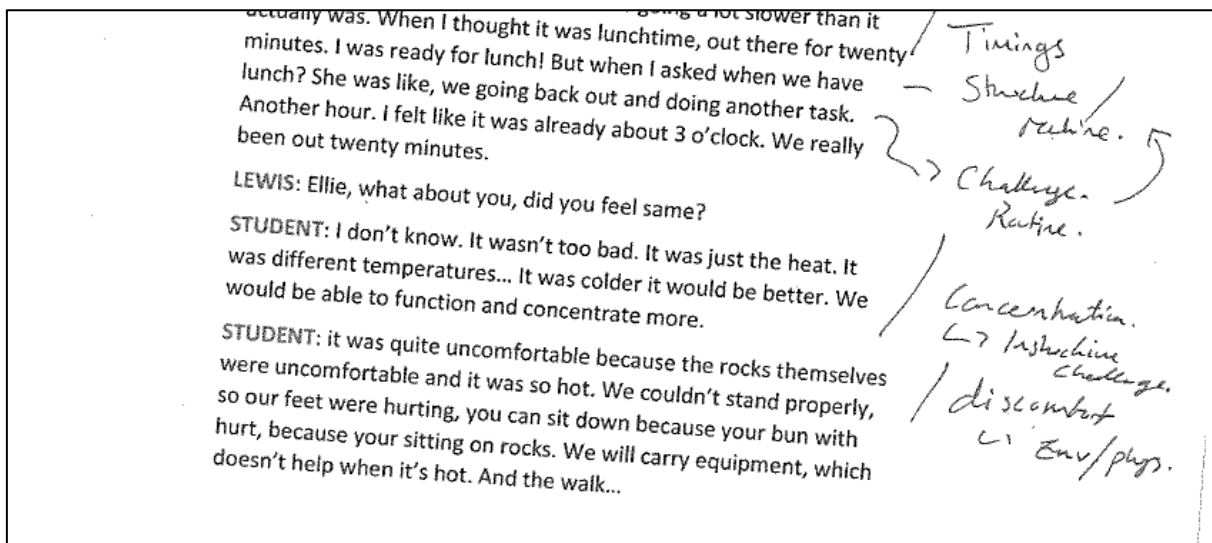


*Figure 3.6* *Excerpt from level one coding*

This provided a link to the topic under consideration, and as seen in figure 3.6, multiple codes could be applied to one excerpt. The approach at this stage was to develop 'level one' codes, which would cross reference with one another and replicate interpretations. No concern was given to a crossover of terminology or a conflation of ideas at this point. While it became inevitable that some coding stemmed from ideas and insights gained in the field, the opportunity during level one coding was to open up the interpretation. As a result of level one coding, 870 codes were generated across all of the focus group transcripts (personal notes were not coded). The next step was to generate level two codes, which involved grouping level one codes together into sets. All level one codes were printed and sorting was conducted by hand, with distinct groupings generated under each case location heading (level one codes were printed on different colour card), giving level two code headings. A 23% reduction from level 1 left 90 codes at Slapton and 103 at Embercombe (see table 3.4). From level three onwards, the case locations were combined and joint code headings were sought. Level 3 created a further 33% reduction, leaving 64 codes (7% of level one codes), with this being reduced further to 26 codes at level four (3% of level one codes). These level four codes became what Yin (2015) describes as 'category codes', representing a more complex, yet broader arrangement of the data. Finally, four

substantive code headings provided a structure for grouping level four codes and relationships could be seen between some of the codes in higher levels. These four level five codes thus provide the empirical chapter headings in this thesis: Structure, Choice, Relationships and Discomfort.

| Code Level | Case Location | | % | % of Level 1 |
|---|---|---|---|---|
| | SL | EC | | |
| Level 1 | 414 | 456 | 100 | n/a |
| Level 2 | 90 | 103 | 23 | 22 |
| Level 3 | 64 | | 33 | 7 |
| Level 4 | 26 | | 41 | 3 |
| Level 5 | 4 | | 15 | 0.5 |
| N.B - Codes combined from level 3 -5 | | | | |

**Table 3.4** *Coding levels and percentage reduction.*

The process of reducing the codes was largely determined by the nature of the codes themselves. An abstraction of data had taken place in the first instance at level one, and a large degree of crossover could be seen between extracts – thus, one student's comment may have attracted up to seven different level 1 codes. In order to make decisions on the coding process, the practice of 'looking back' and 'looking forward' was used (Yin, 2015 p. 197). Decisions had to be made regarding what was important enough to warrant its own code, while looking back at the original source to ensure important points were not left out. The development of complex crossover between codes at higher coding levels enabled the analysis to proceed with a reassurance that little would be lost by reducing the data in this way. By the time level four codes were reached, the codes cross referenced one another to the extent that, although only 3% of the original codes were present, these represented the entirety of the data structure. Decisions on grouping codes together were expedited by the fact that the researcher was wholly engaged with the data collection process and extremely familiar with the material. Additionally, many of the codes correspond to occurrences from the field which had become undercurrents of a priori analysis before data collection had finished as well as aspects of the literature.

### 3.7.3 Representation of data

Once coding had been completed, the level four codes provided the clearest structure for the narrative of the thesis, bound together by the more substantive level five codes which became the superstructure of the four empirical chapters.

Representing the discussions, experiences and insights of students, although grouped under level five code headings, was guided by the 26 level four codes, and to some extent, the 64 level three codes. The transcriptions were coded at level 4 into Nvivo, and sorted into corresponding nodes, enabling quicker access to data and analysis. The 26 nodes were then grouped into four categories in Nvivo. Figure 3.7 shows the relationships and groupings of level four and five codes during analysis. It is clear from this diagram that level four codes do not fit neatly into level five categories, and as such the representation of these codes required care and a great deal of flexibility.
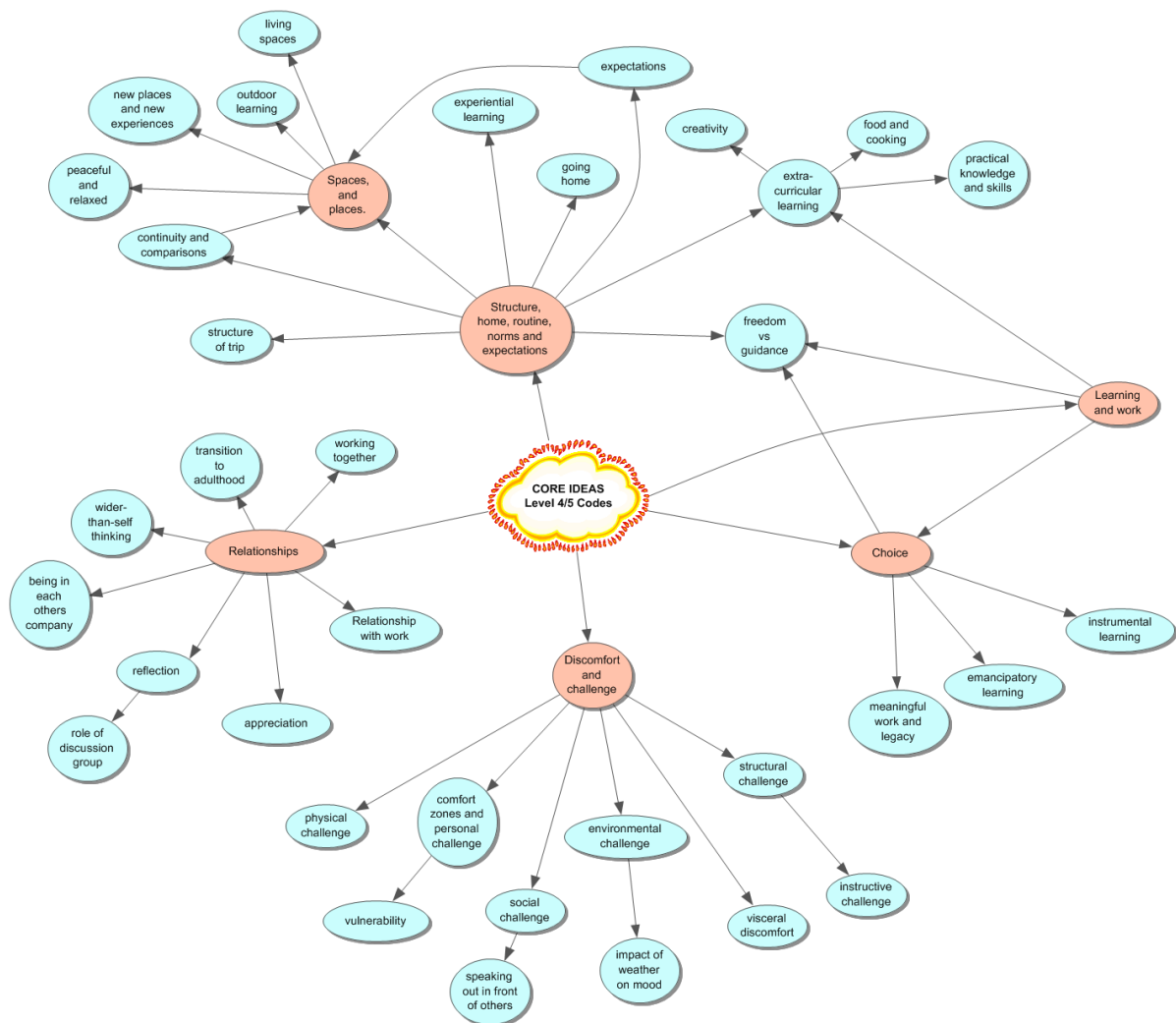


*Figure 3.7:* *Conceptual diagram showing level four and five coding.*

Creating links and connection between the data, the conceptual diagram shown in figure 3.7 provided a helpful reminder of the structure of the chapters and the associations between the lower level codes. This ensured that throughout the research process, especially when working with the higher-level codes, that

interconnection and associations reverberated beneath the surface, and that while 'looking forward' to the empirical write up, the data retained validity by also 'looking back'.

The four empirical chapters which follow emerge from this five-tier coding process and constitute the four level five codes. They are; structure, choice, relationships and discomfort. Figure 3.8 demonstrates how these thematic areas link with the objectives of the thesis.

### 3.7.1   Thematic areas

The following theoretical and analytical devices are deployed for this work, and constitute each of the four empirical areas discussed in chapters 4-7. These empirical themes emerge from thematic coding analysis, detailed in section 3.7.2.

#### 3.7.1.1   Structure

Routine, norms and their associated values and beliefs are upset and fractured by outdoor residential learning experiences. Often an altered structure and set of routines were adopted by the learning community - especially witnessed over long periods (5-10 days). Over shorter periods the disruption to structured activity and home-based norms acted to create feelings of anxiety and homesickness. Longer working hours and new experiences could sometimes seem overwhelming. On the other hand, a changed working structure and delimited learning freedoms were seen to release learning potential in some students. These observations provide insight into the ways in which outdoor environmental education programmes entail new routines and norms, often sitting in contrast to those of home and school. Structural considerations provide insight into the practices of environmental education form a behaviour change perspective, as well as enabling a discussion on spaces and places of learning, including pedagogical theory.

#### 3.7.1.2   Choice

Critical competencies are said to be important for constructing pluralistic views of society and nature. Within sustainability education literature, this theme sits at the juncture of instrumental and emancipatory education where the learner might be empowered to make personal and interpersonal decisions based upon the implementation of pluralistic ethical considerations. Within the research

settings, the author observed choice acting as a trigger for wider decision making as well as interacting with experiences of discomfort, structure and agency. The theme of choice clearly connects with social practices and behaviour change, as well as pedagogical approaches.

### 3.7.1.3    Relationships

Relational encounters are fundamental to the operating of environmental education programmes. Working on a number of scales, this work deals with relational encounters from the self, out to the furthest reaches of human experience in association with other entities. Beyond the obvious, although no less important relationships between individuals within the learning group, the relational encounters of outdoor and environmental education speak to the group as a whole. As a learning community, connections and links are strengthened and significant understandings concerning the nature of work are encouraged. Wider-than-self thinking is developed through relational encounters with one another, as well as through experiences of non-human nature. The performance of the non-human 'other' provides the outer most scale of relationship in this conception of environmental education. This theme speaks to environmental ethics and pedagogy.

### 3.7.1.1    Discomfort

Discomfort is associated with sustainability education as it has the ability to decentre and disquiet deeply held social and cultural norms through exposure to otherwise hidden narratives. Otherwise termed 'challenge' or 'confrontation', discomfort operates within residential and outdoor learning in several ways, both implicit and explicit aspects of programme design. Discomfort is considered from the point of view of an element of student experience which upsets, unsettles or disrupts unchallenged personal narratives pertaining to the environment, society or the self. Appearing in many guises, the study considers discomfort in structure and routines, learning approaches, social groups and the performance of non-human nature. Connected most explicit with a pedagogy of discomfort and inviting commentary regarding pedagogy in the outdoors, this theme also recognises the multiple ethical boundaries and thresholds at play within outdoor learning. This theme therefore also connects with the ecological philosophy of environmental education.
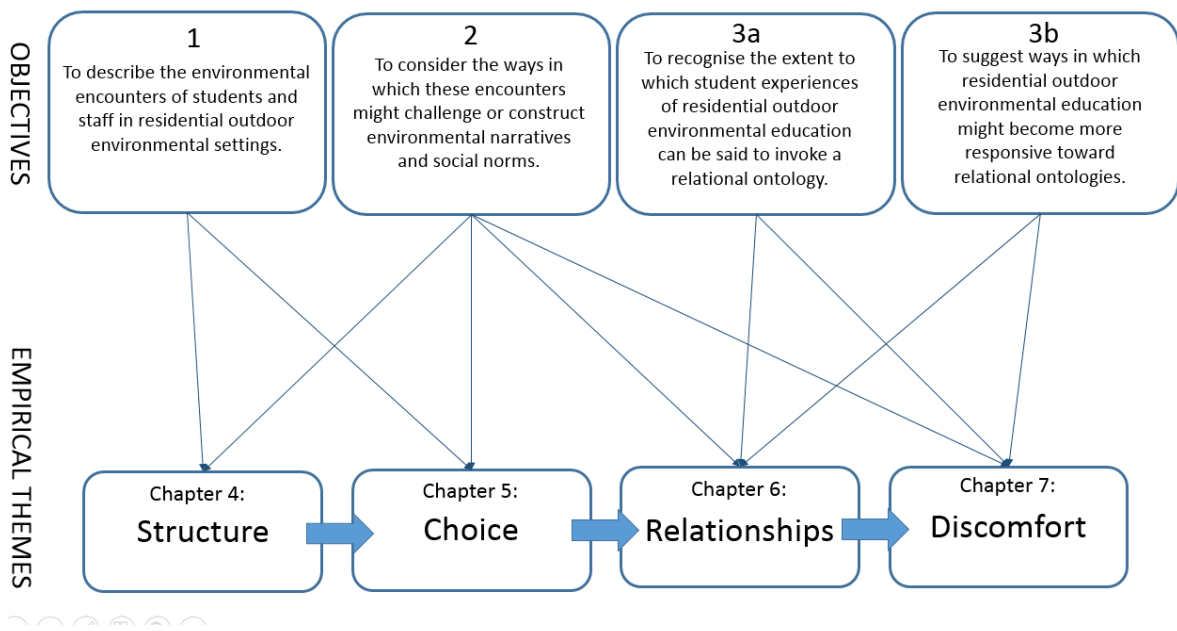
**Figure 3.8** *Linking objectives with empirical themes*

### 3.8 Presentation of excerpts and photography

Research findings are presented across the four thematic areas highlighted in section 3.7, and represented in this thesis as distinct empirical chapters. The data collected is presented in the form of field notes, photographs, personal discussions and interviews. Drawing upon each of these rich empirical sources, the narrative which follows makes use of voices of students as well as staff. The presentation of field notes and photographs are considered below, with some rationale given for their inclusion within the empirical chapters.

#### 3.8.1 Ethnographic excerpts

Much of the prose of the empirical chapters make use of data from focus groups, supplemented with field quotes taken from participant observation notes. However, this discussion alone does not enable the reader to enter the field sufficiently, nor does it do justice to the richness of experience of participation throughout the ten months of data collection. Therefore, in order to more fully enable vicarious encounters to emerge from these chapters, selected excerpts of research diaries and field notes are presented alongside student testimonies. These excerpts contain the author's insights into field experiences, as well as further student testimonials alongside staff, facilitator and tutor comments recorded in the field. These ethnographic excerpts are provided for clarity as

boxed text and are arranged as to be able to be read alone as insights into the daily routines of field sites and experiences of students and staff, yet are placed as to support, enrich and enliven the narrative in which they sit. The reader is encouraged to view these ethnographic excerpts as an unfolding narrative which conjures the activities and atmospheres of the case locations.

### 3.8.2 Use of photos

Photo elicitation was utilised throughout the course of data collection at Slapton (see section 3.5.3). However, for reasons which have been discussed in section 3.6.2 and will be expanded further in chapter 8, photo elicitation was not utilised at Embercombe. Photos offer contribution to the presentation of the findings of this thesis as they provide context for the points made in the empirical chapters while additionally enabling the reader to better grasp the life of field locations. For this reason, participant generated photography is presented from Slapton alongside researcher generated photography (where permissions exist) from both case locations. Participant-generated photography from Slapton is not presented for analysis in the main body of this thesis, other than to contextualise empirical discussions. However, a full thematic analysis can be seen in publication as an appendix (Winks, 2018).

### 3.8.3 Interviews

While interviews were conducted with staff on several occasions (see figure 3.5). Abstracts of these are not presented alone, and are instead woven into the ethnographic excerpts and empirical discussions in which student experiences are centred. Teacher interviews provided research opportunities to deepen the questioning of students during focus group settings, based upon cultural particularities and group dynamics (such as underlying bullying, exclusion or anxiety). Teacher interviews therefore provide an essential contextual undertone to the discussions presented in this thesis.

### 3.9 Conclusion

This chapter has outlined the methodological foundations of fieldwork to be conducted in aid of the research aim and objectives of this study. Beginning with a broad overview of approaches in the field, and a justification for focusing on the interpersonal, subjective domain of qualitative social science in the field, the case has been made to proceed with a case study approach across two case locations. The flexibility afforded to a case study approach as opposed to pure one-site

ethnography enables more succinct and focused periods of time in the field while concentrating on the information appropriate to the remit of the research. Furthermore, a multi-site case study enables the researcher to test assumptions and challenge outcomes of data emerging from a single location. Care must be taken to not become susceptible to the criticism of generalisation in this instance, as a two-site case study remains not far from the 'n=1' fallacy often levelled at case researchers (Baxter, 2010). However, it is with confidence that this research proceeds with such a method, as the insights that are generated by inductive research such as this might enable transferable or 'naturalistic' generalisations (see: Stake, 1995) and constructed knowledge and theory with which further research may be informed or guided.

Furthermore, each of the case locations prioritised for this research represent to some degree differentiated typologies, philosophies and approaches within environmental education. These practice-based differences enable a research approach which considers the theoretical landscape of the dualistic tensions which exist within the field, as outlined in Chapter 2. While theoretical tensions and typologies of approach provide the impetus to explore environmental education across each of these locations, the lived experience of students remains the main interest of the research. Students' lives and experiences of outdoor learning will be considered as part of both formal and informal aspects of the residential, as well as where connection with the natural world and broadly defined principles of sustainability are explicit and implicit. In order to achieve this, it is necessary to deploy a participation-based ethnography, and to explore the nuances of routines, structures and approaches as they occur in the setting.

Research techniques chosen for this purpose are seen to be accessible and straightforward to deploy in the field, requiring minimal equipment while remaining flexible enough to fit into the programme design. As such, a highly pragmatic approach to fieldwork has been taken.

Large parts of preliminary analysis took place in the field – the so-called 'writing down', and 'writing up', while further 'writing out' took place later. Analysis of large amounts of qualitative data, ranging from interviews and focus groups to participant observation notes, have been the subject of substantial analysis work involving thematic levelled coding approach.

The thesis now moves on to discuss this empirical material over the following four chapters. Substantive headings are informed by the coding structure previously discussed and form the backbone of the analysis. The empirical material presented over the following pages is the result of many months of work, across two case study locations and through the deployment of four distinct research methods.

# Chapter 4 Structure and Home

**Arrival of the first group at Slapton** - *Slapton, 27th March 2016, Group E*

I arrived today just before lunch by bus, and walked up the road from Slapton turn to the Field Centre. A bitter wind was blowing and the centre was quiet when I arrived. I checked in and found [the tutors] in the middle of planning for the arrival of the group who were due in at 1pm. I noticed how quickly I made myself at home. I found and empty desk and helped myself to a laptop. I had none of the anxiety that I had experienced at the same time at Embercombe, and none of the awkwardness of not knowing routines etc. I made use of the printer to prepare the introductory materials for students and placed them on their desks. After lunch the group arrived and we met them in the lab for a quick introduction. They seemed to settle down quickly and E ran through the centre introduction. I was struck with how official and well-rehearsed this felt compared with Embercombe.

Later on in the day, when we returned from the field site, this seemed to become reinforced by three practice exam questions providing the structure for the follow up sessions. I was impressed by the quality of E's teaching, especially her differentiation of tasks to students – giving them choice of materials. The students also seemed to get on with the work despite just having arrived following a 4 hour bus journey.

At dinner, I also noted that the students sat separately to the staff, at the other end of the dining room and the tutors sat on a different table to the school teachers. The food choices were apparent at the counter, including two vegetarian choices. The meal choices were given scores on the menu which represent the embedded carbon of the meal. This offered a talking point regarding the environment and meals as well as choice.

*Excerpt 4.1 Arrival of the first group at Slapton.*

## 4.1 Introduction

This chapter focuses on the structures present in the experiences of students at the case locations. Structures, as conceived of here, refer to both the physical structures of the location as well as the norms and routines of being in new places with new sets of expectations. Often the contrast between the structures and routines of home and those of the residential setting are noted, and for this reason, the term 'home' is also used. Home takes on a variety of meanings here as both a place of normal residence, and the sense of settling into new patterns and routines which often occurs during longer trips away.

This chapter connects clearly with objectives 1 and 2 of the thesis. Objective 1 – focusing on the environmental encounters of students - is met through an examination of the lived experiences of students during their time at both Slapton and Embercombe, as told through their own words presented here empirically. Environmentally speaking, encounters presented within this chapter focus heavily on the experiences of being away from 'normal' settings and routines, as well as

being in new environments. The wider environmental experiences generated and supported by this change in routine, expectation and surroundings are detailed further in the proceeding chapters. This chapter, however, provides important context to these wider encounters. This chapter focuses more clearly on objective 2 as it concerns itself with the construction and challenging of social and cultural norms within these new settings. While the norms described within this chapter are not always inherently or directly 'environmental' in their construction, their discussion here provides the context for further exploration of environmental discourses in later chapters.



*Photo 4.1 Nick introduces the rocky shore to students in Group F (author's photo).*

## 4.2 Conceptual context

Much has been said of the oppressive and institutional characteristics of schooling (Illich, 1973, Freire, 1970), as well as the way in which institutional structures create social consensus and set norms – often marginalising fringe voices and concerns (Cialdini et al., 1991, Ogbor, 2001). The recognition of education as a system of consensus links with work on social and cultural norms. Social norms consist of the societal consensus "rule and standards that are understood by members of a group and that guide and/or constrain social

behaviour… emerge[ing] out of interaction with others [and not the rule of law]" (Cialdini and Trost, 1998 p.152). While schooling inevitably involves an authoritarian component not dissimilar to the rule of law, the social aspects of schooling present themselves as an institution where collective conduct is largely adhered to.

Links can be made with instrumental, emancipatory and free choice learning approaches which each relate to structures, norms and rules in different ways (Falk and Dierking, 2002, Wals et al., 2008). School-based learning at secondary level in the UK ordinarily implies a focus on curricula and specifications, which entail a structured approach to learning – normally following a syllabus throughout the course. This instrumental approach to learning comes with a different set of expectations, outcomes and processes from an emancipatory approach, which, although seemingly more 'open' also entails structure, routines and norms.

Another, more recent development of social theory pertinent to the consideration of social norms and group behaviour is that of social practices. Social practice theory postulates that behaviour is emergent of the dual contributions of individual agency and a meta-structure of the state, or a governing body of some description. The purpose of this type of analysis is to understand the interaction between the two, mediated through systems of provision (from the state or governance structure) and choice (from individuals). Through this theory it is possible to begin to understand group behaviour as neither the responsibility of the individual nor the state, but through interaction between the two. Social practice theory has been applied to multiple fields and has influenced policy and public discourse on behaviour (Hargreaves, 2011, Spaargaren, 2003). The interest in this theory for this thesis stems from the desire to understand better the interaction between the education system, including teachers, the culture and spaces of learning, and the students themselves. and as an approach to mediating between the educational paradigms of instrumental and emancipatory learning approaches (Wals, 2010b, Wals et al., 2008).

Although much has been of the importance of spaces and places of learning from a representational perspective, that is from a perspective that focuses on the medium of spaces as mere containers of practices, recent additions to non-representational education theory prompt us to come to new understandings of space and place in alternative education (e.g. Kraftl, 2013, Clarke and Mcphie,

2014). Seen from a non-representational perspective, space is construed of materiality, affect and embodiment – and is therefore a live and responsive aspect of the environment. Along with work on behaviour such as social practice theory and actor network theory which focus on emergence rather than components (Latour, 2005), non-representational education theorising of the liveliness of space tells us something about the importance of structure – or rather the lack of – in a post-structural conception of residential outdoor experience. Therefore, a poststructuralist analysis of these experiences begins with the assertion that reductionist analysis cannot conceive of the importance of interaction and emergence, and therefore, any comment on structure will be developed from a relationship with individuals, the group and the wider environment in what Kraftl (2013) terms 'messy materialities'.

Considerations of philosophical structural orientations aside, other considerations are taken into account here with a more prescient concern for students themselves in the places of learning. One such concern is that of continuity and comparisons between structures of learning settings. Continuity issues for students learning away from home have been covered by previous studies focusing on associated stresses in university-aged students living away from home for the first time (Thurber and Walton, 2012) as well as homesickness more generally (Van Tilburg et al., 1996). Although a definition is often resisted, and similarities drawn to separation anxiety, homesickness is normally linked to new social routines, people and environments causing a yearning for familiarity.

The term 'home' is also open to interpretation. We might turn first to classical geographical representations of 'home' such as those given clarity by Busch (1999) where the physical manifestation of home is a place of sanctuary, nourishment and work. Alternatively we might look to an alternative set of literature for clues as to the meaning of 'home' for students studying in new and varied settings; home when considered from a spatial perspective concerns not only physical spaces, but also understandings of familiarity and distance. Home from this perspective may not be linked to a specific place, but may instead be manifested in emotions, and practices and may be seen as an embodied state of being aligned with poststructuralist understandings of spaces of learning. In this way, residential learning settings might be said to embody representations of home through the interactions between students and their environmental and

social milieu. So too, distance and unfamiliarity may also occur and give rise to feelings of homesickness. These feelings of uneasiness associated with being in unfamiliar circumstances mesh with the discussions held in chapter 7 on challenge, discomfort and uncertainty, whereby discomfort is not only felt at spatially distant locations from classically referred to spaces of 'home', but can also be felt as personal discomfort associated with structures of learning, norms and routines of new environments.

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**A discussion with the teacher about school and freedom** – *Slapton, 28th March 2016, Group E*

In a cold breeze we gathered at the back of the farm shop where Claire introduced the fieldwork to be conducted here. "This is a useful case study, okay, so it will be useful for your exams". The background to [the farm shop] as a business and the history of the farm shop through various ownership changes over the last 15 years was given. The group diligently took notes while Claire spoke. "This is a good example of farm diversification"… Students were then introduced to the fieldwork to be undertaken: The fieldwork techniques – car park survey, non-participant observations; logo analysis; sketches using iPads.

I had a discussion with the visiting teacher about the question of freedom and obedience in education settings. Talking about the students she said "mostly they just mill about and line up. It makes them very obedient and easy to teach but I do worry about that – how obedient they are. I think it's a shame". Contrasting this to a previous school she taught at, with more open space and grounds she noted "It makes a difference having outdoor space – they had lots of grounds there to be free in. At [the school], they just have a tarmac area. Some of the higher energy ones struggle because of this. These students don't have much freedom to roam". Making a connection between student learning independence and personal freedoms; "they aren't very free – they can't leave the school unless they are sixth form. These students are very teacher-led, they look to us and are very obedient".

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*Excerpt 4.2 A discussion with the teacher about school and freedom.*

With these conceptual considerations in mind, this chapter now turns to the empirical material developed from the coding framework, loosely defined under the heading 'structure and home'. Material presented in this chapter has been derived though a detailed analytical approach outlined in chapter 3. Structure and home appeared early on in the analytical process as large conceptual foci, and thus merited a discussion space of their own. The concept of structure also connects well with the objectives of this thesis, especially concerning the understanding of social norms and attitudes toward the environment (objective 2). It is also important to recognise, that although the focus for this analysis is

narrowed to this theme, the material which follows resonates and intersects with the chapters which follow it.

## 4.3 Empirical analysis

The empirical work on structure can be divided into three categories observed in the field. The first of these covers routines and norms as expressed by the students themselves – often recognising field-based residential experience to be different from school and home-based experiences – connecting with objective 1. Secondly, the role of adults will be considered, specifically the way in which adults provide guidance and structure or permit freedoms within the learning environment – to some degree connecting with objective 3 (returned to in more detail in chapter 6). Thirdly, the places and spaces of learning will be considered with respect to the structural significance they provide and the ways in which outdoor spaces of learning offer opportunities to recognise post-structural and relational ways of being as part of residential learning – connecting with objective 2.

*Photo 4.2 "If this bus was in London, there would be complaints to TfL straightaway saying why have you got buses that are all dirty… But here it's like, oh, it's probably just driven through some puddles and stuff" (Focus group participant, Group E).*

### 4.3.1   Routines timings, and norms

Throughout fieldwork, participation in field courses and programmes revealed a large focus of the students on comparisons and reflections on previous experiences in relation to the current experience. Often this came in the form of comparing the approach to learning and the routines and provisions for learning provided in each setting. Students often commented that learning approaches were different in the residential setting from that which they commonly experience at home or at school. However, students did not only experience structural differences in terms of the pedagogical approach – they also found difference in the routines and timings of life on a residential programme; with longer days,

different routines and expectations and different degrees of responsibility. This section focuses on the role of routines, timings and norms in shaping the experiences of young people living and learning in residential field settings.

Arrival at residential learning settings was often greeted with surprise, as a degree of expectation had arisen during the preceding lead up to the trip and on the journey. Much of what students expressed initially came from a place preconception which later gave way to a changed perspective on life on a residential, such as at Embercombe as Sam's comment suggests:

> *"When I was on the coach I was thinking this is a relatively long journey, it won't be worth it. When we got here, the first night was quite cold, but then when we did some work it was hard work, but it was good hard work so I really enjoyed that. And then I got more of an open mind, and the nights got less cold. I put more layers on, and just worked harder it was more fun".*

> (Sam, Embercombe, Group B)



*Photo 4.3 The entrance to Embercombe (author's photo).*

Others had been to Embercombe before, and so had preconceptions linked to the place itself, although these were often altered throughout the trip where a return visit often came with greater freedoms granted to explore the land:

> *"I wasn't too keen on coming back again, but then when I got here I was like, we got new places to go, were allowed in the forest and stuff. It was*

*really cold on the first night and then we got on with the work and it was like, oh it's a bit better".*

(Nicole, Embercombe, Group B)

At Slapton, these expectations were seen to shift in similar ways:

*"I did hate it at first but then when we were walking down the beach I thought this is actually really beautiful place. Rather than hating it thinking I was dreading it, I thought this is actually a really lovely place if you look at it like that"*

(Kirsty, Slapton, Group F)

For one group of students the traffic and long journey time to get to Slapton meant that the worth of the trip was questioned from the start:

*"I do think on the first day we were all hating it quite a lot. But the journey did have a massive influence on that. There was so much traffic. It took a seven hours to get down here. I was just thinking, oh it's not going to be worth the seven hours journey time. We were all so uncomfortable and hot. We were all just so bothered that, when we got here we are all like, oh now we've got a whole five days – it's going to be horrible! "*

(Oliver, Slapton, Group F)

These shifting expectations, often influenced by siblings or friends in years above seem symptomatic of entering new environments and settings where much is unknown. As commented on above by Nicole, this was even the case for those who had been to Embercombe before. Many of the doubts commented on by students gave way to enjoyment as the trips went on, but there was much about the nature of the trips in terms of their routines and norms that challenged student's ideas of familiarity associated with school or home. In particular, conceptions of how the education system works, rules and the pedagogical differences in approach were noticed by students in both settings. At Embercombe this was expressed in terms of freedom to be responsible:

*"It was better than being at school. It was better being here and being outside doing activities, than being at school and being silent, and getting told off for everything you do. I enjoyed it".*

(Sam, Embercombe, Group B)

This was stated in other terms by Jessica, this time more explicitly in relation to the environment at Embercombe:

*"I think is a lot more freeing when you're in an environment like this, there is not just building after building and people rushing here and there… I think it's good to be with other people that are free. That doesn't happen if you're working in an office, or going to school. If you go into a busy house as well, that can add on stress".*

(Jessica, Embercombe, Group D)



*Photo 4.4 West yurt village at Embercombe (author's photo).*

At Slapton, the structural differences were noticed by students in accordance with the educational approach which seemed more emancipatory than the instrumental focus of school-based learning:

*"At school we do get told a lot – in my lessons it is like reading from a textbook. You've got a thing in front of you, you just need to take it in.*

*Whereas here, you just need to start from scratch and do everything by yourself.*

(Billy, Slapton, Group F)

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**Some independent study and a discussion on free time**
*Slapton, 11th July 2016, Group F*

I arrive to the centre early and spend a short amount of time catching up with notes before making my way to the lab to catch up with Tony (the Tutor). Today, the plan is to give the students an opportunity to put what they have learnt yesterday into action by planning and implementing an investigation of their own. They will work independently in the woods and the beach to collect data which will later be analysed in the lab. The students arrive into the classroom and they quickly begin working to plan their investigation for the day – determining which variables they will measure or monitor, and making lists of equipment. Once they are ready we all head to the equipment shed to hand out equipment to the various groups. One group goes off to the woods and the stream while another group heads to the beach. We wait for an hour or so before following them.

When we get there – there is a set of students down at the stream getting on with their measurements and observations. I offer my assistance to some of them who ask a range of questions about equipment, identification and the format of their investigation. Generally, the groups work without any assistance or direct guidance. There is a member of staff in the woods with them, but the effect is one of independent and individual work. I continue to wander through the woods for a short while and then leave, perhaps feeling a little awkward – just 'hanging around' as the work proceeds. I walk back up to the field and take a detour through the woods before exiting and heading back down to the field centre. By now the sun is back out and it begins to feel a little warmer. I arrive at the field centre in time for lunch.

Most of the students return from the field earlier than planned, having collected all of their data. Some of them have to go to the soils lab but most drop off their equipment and head to their rooms. I witness a small discussion between Tony [tutor] and the teacher of the group regarding timings. Tony had planned to have a formal session to review the data collection at 5pm, but by this time it is only 2pm leaving a large gap. The teacher obviously isn't happy with this large amount of 'free' time and says – "I want them working". Tony suggests that they do the evening session early, but [the teacher] makes it clear that she wants them engaged with work right the way through – both this afternoon and this evening. The meeting time is revised to 3:30pm.

After dinner, the students begin to drift back in slowly and with less enthusiasm than before. Some of them are late. Tony begins to explain the focus of the session until 8 o'clock. They are to make a detailed method for tomorrow's investigation. In mid explanation, two students walk in – one of them says to the teacher - "I really don't want to be here". The teacher feigns pity in response. There is an air of discontent around being back in the classroom. Slowly work commences and most students begin to focus on the task. This goes on for some time until, one by one they finish and are allowed to go, leaving a small handful left until 8pm.

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*Excerpt 4.3 Some independent study and a discussion on free time.*

As noted in the extract from field notes above, it wasn't always the case that residential learning was seen by students to be more empowering and free from the constraints of school culture. Some students at Slapton commented that they felt the residential to be like a continuation of school, only more intense. Ahmed provided a concise summary of one discussion:

> *"We have like deadlines for everything. Everything is like, right you've got this time to do this then you got a lesson, and this time you have dinner and after this you've got a lesson and then you got two hours free time… It's too like, intense".*

> (Ahmed, Slapton, Group F)

Lizzy added:

> *"I feel like it's a bit too much like school… You know what I mean?… the whole atmosphere is like, you're in school. I know that it is educational, but the fun side of it is… [Tailing off]"*

> (Lizzy, Slapton, Group F)



*Photo 4.5 The main building at the entrance to Slapton Ley Field Centre (photo credit: Field Studies Council).*

It seemed that for some at least, Slapton represented an intensification of school, seen as an extension of the classes and subjects learnt in formal education. While this was helpful for many of the students, through the instrumental and contextual basis on which the trips were seen to have merit, this created a backlash from others who felt the day length, and timing of lessons was too much. Perhaps this was because for some of the students, being away from the formal structure of school was an opportunity for relaxation and escape from the routines and norms of school. Howard reflected on, some of the stresses of home and school life:

> *"I don't get to relax as much, I live in London; noise and traffic and sirens and a lot going on. Also, I think at school you always have homework to do, you always think about tests and revising… And you rush, and you think you have to do this and that and you don't have a lot of time to relax".*

(Howard, Embercombe, Group D)



*Photo 4.6 Rich demonstrating fire lighting by friction to light the lime kiln (shown in the background). Embercombe, Group B. Author's photo.*

For many students, relaxing and removing the stresses of home and school was also about being away from technology such as phones and television. While this

occurred at both locations, by merit of being outdoors and being occupied elsewhere, at Embercombe the distancing from screen-based technology was made more explicit. While some resistance to the no mobile phone policy occurred, most students such as Adam commented on how beneficial they found this experience to be:

> *"I think it's also good that we were away from distractions which we usually face. Like computer games, mobile phones, TV. So we kind of think about our day. Because sometimes when I get home I just sit down and watch TV. I don't think back to what's going on or the experiences I've had... Here you kind of have to do that. That's really good".*

> (Adam, Embercombe, Group D)

Structural differences between school and residential learning were not only limited to educational approach, routines and norms. Very much at the heart of the experiences of the young people was the role of adults, as it was the engagement of adults within the learning process that shaped the wider structure of learning for students. It is this aspect that this chapter now explores.

### 4.3.2   The role of adults

Adults shaped the experiences of young people learning as part of residential programmes in multiple ways. The first, and perhaps most obvious way in which adults affected experiences was through the provision of structured learning; including targets, reinforcement of timings and affirming of contextualisation for assessment. In many ways, these structural provisions through adult guidance were also seen in contrast to school-based learning – where residential experiences were seen to be freer and less strict, both in terms of learning and rules governing social time. Sometimes, however, learning at residential settings was seen by students to be an intensification of school-based experiences – perpetrated by the role of the adults. Across all of the examples of the ways in which adults interacted with student experiences, the balance between 'adult as an authority figure' and 'adult as a guide' was prevalent. In addition, staff at the residential settings were often perceived differently to teachers and staff accompanying the group – although school staff were also perceived as being different in the residential setting to how they were seen at school or home.

For many students learning at Slapton, the role of adults was akin to that of the school teaching (telling in the way in which students would frequently refer to centre staff as 'sir' or 'miss', despite them introducing themselves using their first name). Students at Slapton saw the role of the adult/teacher as a conveyor of instrumental knowledge which would help them to further their understanding of the given subject. However, education staff (tutors) at Slapton were seen to be less didactic in their approach and more facilitative of learning, as Lola describes:

> *"At school teacher just gives us a sheet and says read it. Whereas, whether that's just [the tutor's] style of teaching, she just gave it to us and gave us the recordings and taught us how to do it. Whereas, we don't really do that at school. It is expected to know how to do it".*

<div align="right">(Lola, Slapton, Group J)</div>



*Photo 4.7 A group overlooking the 'lost village' of Hallsands, Start Bay, Slapton (author's photo).*

This acknowledgement that teaching approaches were different at Slapton compared to school were expressed as direct remarks concerning the ways in which tutors go about teaching, or sometimes less directly in terms of the

student's relationships with the material of learning and their motivation to work on their own projects in the time they have at Slapton. This was expressed by Kirsty:

> *"I think here it's kind of made people go out and be like, okay I actually need to get done, I actually need to do it. Because otherwise, what's the point of being here? Because there is going to be no teacher that knows everything about your investigation and you can't make up the results or borrow somebody's, because you will have all done different things".*

(Kirsty, Slapton, Group F)

Richard also commented on his motivation to work, compared to school:

> *"You're more open-minded. You're not rigid. Whereas at school, you just bored".*

(Richard, Slapton, Group J)

While at Slapton, the tutors were recognised as teachers, yet in a more facilitative role, at Embercombe, this distinction between adults at school and adults on the residential was even more pronounced, even concerning school teachers themselves:

> *"Whereas in school they are teachers, and they give us homework… I just feel equal to them here, more equal, I work a lot better with them… "*

(Anna, Embercombe, Group D)

At Embercombe students frequently referred to adults as 'equals' as part of a community, as described here by Lilly:

> *"The adults have to have control because they're leading the session. But they treat you as equals, I found. It's not like 'I'm the teacher do as I say', it's more like 'we are all here together, and we are all here to enjoy it'. We're all one community, and I really like that aspect".*

(Lilly, Embercombe, Group B)

This recognition of equality in the learning community also occurred at Slapton:

> *"I feel quite equal to them. Whereas in school they are teachers, and they give us homework… I just feel equal to them here, more equal, I work a*

*lot better with them than… Yeah, I'm really enjoying this a lot more than school".*

(Kendal, Embercombe, Group D)



*Photo 4.8 "We're learning about it as we go along. We might be talking about it in the exam, and so everyone taking notes and everyone focusing on what [the tutor] is saying. I think that's what this trip has been about - gaining experience" (participant photo, Group E).*

At Slapton, adults were commonly seen as enablers of the learning experience, providing knowledge, guidance or oversight of the learning of the class – prompting some students such as Kendal to comment that they worked better with them than at school. However, some Slapton students stated that they felt it was much the same as school, only with added freedoms:

> *"I was interested in how teachers will teach us. Like would it be different to school? Which, it isn't really. It's the same, but they do give you a bit more independence so you can get on with it and do what you want".*

The field work experience at Slapton represented a distinct change in pace and routine for many students. Long days and lengths of time spent outside, followed by long working hours in the classroom in the evening created resistance from some students. Often these evening sessions were pressure points where a lack of concentration and deteriorating behaviour led to students being told off by teachers and staff, such is described by Sadie:

> *"We have done a lot of work. When you come back and you have lessons, and then you have dinner, and then you have another lesson… I don't think really works. We were being shouted at last night, but we're doing work at 8 o'clock at night! Of course we going to be tired".*

> (Sadie, Slapton, Group H)

However, some students saw a greater degree of flexibility in terms of independence and responsibility to get the work done as a result of longer amounts of time spent focusing on the subject. Mark noted too that part of his motivation to work came from the lack of pressure applied by teachers:

> *"Yeah, but even just like me staying in after the lesson yesterday because I wanted to get it done and I feel like if the teacher had been moaning all day about getting it done, then I would have just left it, and done it in the morning".*

> (Mark, Slapton, Group F)

Independence from the teacher as a governing and controlling force was brought to the fore in both settings where reflections on the hierarchies and power structures of schooling became a focus for discussion. At Embercombe, this was especially the case, where a questioning of authority and opportunities for greater freedom were encouraged.

One student commented:

> *"I think the whole thing with the adults, you don't feel like there are adults and stuff… It's not really like they're outsiders. In the class there's always a barrier between the students and the teacher, there's always that sort of*

*thing. You wouldn't go and joke with the teacher, it would be a bit weird. Here there's not that much of a barrier".*

(Nydia, Embercombe, Group D)



*Photo 4.9 Students design and construct a fire pit with adult facilitation, Embercombe, Group A  (Author photo).*

In contrast to the new ways which students were finding of relating to adults in residential settings, anecdotes relaying the ways in which adults treat them in school emerged during discussions. Often these anecdotes involved the adult's use of controlling power during school time, such as the story told by Lester at Embercombe one afternoon:

*"In one lesson, the teacher has a naughty book and you're put in it when you talk. We not really allowed talking in lessons that much and we are not allowed to go to the toilet because they think we going to stay out there. But sometimes we do because lessons are… rubbish. There is no freedom whatsoever".*

(Lester, Embercombe, Group B)

Such stories in part reveal the ways in which student relate to adults and power structures of school on a day to day basis, but also reveal the contrasts which prevail in residential settings. However, the residential setting were not always sites of greater freedoms and free choice. On occasions, the structured approach at Embercombe challenged some of the student's sense of autonomy:

> "I'd say the thing that I struggled with is the way everything is constructed in a way. Because I'm a compulsive person I like to do whatever I want. And also, because I live near London I like that freedom of being able to go to a gallery or walk in a park or do some shopping. I like to have that freedom and impulsivity. I just feel like I'm on a constant time schedule and even the time that I do have to be on my own and in my own space of mind, that too has a time limit. I don't do well with structure. So yeah, that's been quite challenging to me. I really can't wait to just being my own space, and have my own freedom".

(Simon, Embercombe, Group C)

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**Work eliciting conversation during the gathering of materials for a lime kiln**
*Embercombe, 25th April 2016, Group B*

We went down to the medicine garden with the tools and equipment. The group split then into three working parties. I first helped to lead a group which was to gather large poles from the hedge. We collected the poles with a small amount of complaining from the children who talked of the activities being boring. After collecting the hazel poles these were used as uprights for the frame of the lime kiln. Meanwhile another small group had levelled and constructed the base of the kiln. I then took another group off to gather the lime rocks which were behind a nearby shed.

This physically demanding and relatively arduous task yielded some interesting discussion from the two girls I was working with – although complaining about the work, they seemed interested in the rocks – and upon questioning we talked about the provenance of lime stone and its properties. "If this was how school lessons were like, I might actually enjoy learning about geology!" one of them exclaimed. This also led onto a conversation about geological epochs and climate change, which involved discussion about temperature rise and thresholds.

We separated the rocks out into rocks to be broken up further and rocks which are already the right size to go in the kiln and then went to help the others begin the weave of willow around the larger upright sticks to form a frame for the clay to be daubed on to. During this time I worked hard to keep the students engaged – a couple of them were particularly prone to distraction and distracting others from the task. We began to build up the frame and talked about places in Bristol.

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*Excerpt 4.4 Work eliciting conversation during the gathering of materials for a lime kiln.*

While it seems that the role of adults in both settings was to facilitate rather than to determine learning which took place, Embercombe promoted a deeper questioning and overturning of authority than Slapton – although some of the students recognised the structure worked against their freedom and impulsivity. Whereas, the approach at Slapton was to retain the teacher as authority figure and as such students recognised the hallmarks of schooling at Slapton. At Embercombe, schooling was subject to significant questioning, seemingly in light of experiences from the residential programme when held in contrast to school and home life. However, comments from students attending both Embercombe and Slapton revealed that adults were cast in different lights whilst on residential programme compared to school, with students commenting on the 'relaxed' nature of adults away from school and the greater degrees of freedom they permitted the students to have.

Alongside norms, routines and the role of adults in outdoor residential learning settings, another aspect of the structure needs to be considered, namely the role of spaces and places of outdoor education and residential centres. It is to the structural significance of spaces and places that the final section of this chapter turns.

> **Arriving and settling in to a new home; rhythms of the place**
> *Embercombe, February 5th, Group Z*
>
> The group waited in the yurt until it was time to walk to the east Yurt village where they are staying. They go in small groups so the progress is rather slow. There was some confusion over bags and where their possessions had gone – it was dark by now and the general atmosphere was one of confusion, but high spirits. I noticed the other facilitators standing calmly in the middle of the yurt village while things settled down. While the kids found their place and the facilitators helped them to light their fires I had a chance to talk to JC. He told me about groups who return. He said that sometimes this school send their year 7/8 students, and then they return [on this trip] 2 years later. "It's like coming home for them. They speak of coming home, but it's in a sense that they are also coming home to themselves". He then spoke about the relaxing which takes a while to achieve with groups, as people fumbled their way from yurt to yurt in the dark around us and wood smoke began to rise from the flues… "You need seven days at least with a group for them to get what it's all about. Tomorrow and Sunday will be tough for them, by Tuesday they'll be starting to relax into the rhythms of the place".

*Excerpt 4.5 Arriving and settling in to a new home; rhythms of the place.*

### 4.3.3 Spaces and places

As well as the logistic, authoritative and pedagogic structural contrasts and manifestations within residential settings, so too, the spaces and places of learning take on a role in informing the experiences of students partaking in residential learning. Not least in this section, outdoor learning settings will be considered as places where structures associated with school-based learning are challenged, transformed and reconstructed, even disassembled. The role of the non-human environment will be considered as co-constructors of experience. So too, the notion of home will be considered from the point of view of places of belonging and spaces of familiarity. As well as the outdoors as being a distinct place of learning, the social setting in which non-structured time (as it was sometime called at Embercombe) or free time (as it was called at Slapton) will be considered.

*Photo 4.10 "I've never been to the countryside before in my life. I've literally been to cities. And that's it. Even when I go on holiday, I don't go to the countryside. It has been a massive change for me" (participant photo, group I).*

Most clearly for students at Slapton, the surrounding environment was mentioned for its beauty and contrast to the (mostly urban) surroundings of the student's home settings:

> *"I think that it is just incredible. Everywhere I went it was just beautiful to look at. Especially last night, when we were walking along the lake when the sun was setting it's just a beautiful view. That stood out for me. I live on a main street so this is very different to me".*

> (Fay, Slapton, Group I)

Students at Embercombe also found this to be the case, with many commenting on the relaxed feel of the setting:

> *"I think is a lot more freeing when you're in an environment like this, there is not just building after building and people rushing here and there…"*

> (Ryan, Embercombe, Group D)

In addition to the feel of the surrounding environment, students also noted the role of the living spaces themselves in creating what they determined to be part of the overall experience of learning in the setting. At Embercombe these living spaces were in yurts. While many of the students staying in the winter months relished the opportunity to be in charge of lighting their own fires and the responsibility which that entailed – detailed in chapter 5, some found the experience of sleeping in yurts uncomfortable, not least because on some occasions the students were cold. However, when questioned as to whether they would prefer to stay in a centrally heated building, it was suggested that the challenge of staying in the yurts was part of the Embercombe experience:

> *"I think it would have changed my perspective on it. I don't think it would have been for the best. I do like how it just reflects everything about Embercombe. It's quite refreshing, because it's a lot different from our homes and it's quite nice to have a different experience".*

> (Errol, Embercombe, Group B)

Another added:

> *"Yeah, because in the yurts you have to work to collect firewood so you can be warm at night. If we didn't have that, and had central heating it wouldn't have reflected what Embercombe is about".*

> (Ryan, Embercombe, Group D)

A similar significance was placed on the outdoors as a learning setting by some of the students who commented on the contextual importance of place and contrasted the outdoor and experiential learning approaches of both settings in comparison to school-based learning. While this will be commented on in chapter 5 (choice), it is worth focusing on here in order to make the point that the students recognised the outdoor learning to be a way of engaging with the material and topic of learning:

> *"With outdoor learning, [I] get more into it than if [I] just sat at a desk. I zone out, and start looking at other stuff and not really paying attention to what's going on in front of me. If I'm outside, and I'm engaged in what I'm doing, like a bit more of an activity, you remember more stuff from it".*

> (Howard, Embercombe, Group D)

*Excerpt 4.6 Coastal fieldwork; contextualising knowledge, memorising facts.*

At Slapton, the outdoor environment was an opportunity to contextualise knowledge for the exam:

> *"The way I see it, is you cannot really go look at the book for over forty-five minutes and take everything in. After a certain amount of time it will just get too much. When you're outdoors you do get tired, but when it comes to learning outdoors you can continue but towards the end the day you do get tired but you do learn from it. Other people [who come here], they normally ace the exam. They can relate it back to this trip".*

(Shaun, Slapton, Group I)

However, the suggestion by many of the students that they learn better in outdoor environments was challenged by one who recognised the benefits of classroom learning for contextualisation of outdoor work:

> *"I think that you can't learn everything outdoors like this, I think you have to have some time in the classroom in order to understand the things that you see in the outdoors. Not all parts of biology outdoors are they? For*

*what we have to do we can't spend the whole time outdoors. For the bits we can I think we should".*

(Connor, Slapton, Group I)

Related to the contextualising nature of the outdoors, covered further in chapter 5, it is pertinent to the aim of the thesis to consider the wider significance of being and learning as part of the wider natural (non-human) environment. As will be further developed in chapters 6 and 7, the role of the non-human environment in 'performing' and co-creating experience is an important consideration, not least in terms of the third objective*; to contemplate the extent to which student experiences of residential outdoor environmental education can be said to invoke a relational ontology.* It is here that the topic of structure is challenged and representation becomes troublesome. For within a post-structural analysis, the non-representational attributes of the wider environment are at play in shaping the experiences of the learning group. In particular, the environments which are the subject of analysis and data collection at Slapton and those which provide a backdrop to experiential learning at Embercombe can be described as responsive in the ways in which they affect and are affected by the students themselves, as tenderly expressed by Jessica:

*"Instead of learning at a desk about stuff, we could build the lime kiln. Instead of learning about limestone… we actually experienced the limestone"*

(Jessica, Embercombe, Group D)

At Embercombe, this is in part recognised to be an aspect of experiential learning, where animistic qualities of the environment are invoked through stories and song, and even through the descriptions of the animals and plants on the site (see chapter 7) the implications of a post-structural analysis escape explicit reference and are instead implied through a culture of being and belonging, broadly referred to as community – given further consideration in chapter 6. A relational ontology is given prescience through the role of the spaces of outdoor learning through the very nature that this is where learning indeed takes place, as noted by Nicol (2014).

At Slapton, a notion of continuousness between indoor and outdoor learning has

been noted – challenging an established dualism – yet an invocation of the non-human environment as being co-constructive of learning is harder to place. Instead, a rational-scientific paradigm prevails which determines the non-human environment explicitly as a place of study – therefore the outdoors becomes a 'living laboratory' to be considered through a scientific lens. However, as will be discussed later in the thesis, this is implicitly not the case at Slapton either. The non-human realm patently performs and co-constructs the lifeworld of students experiencing learning in the outdoors.

The role of the physical spaces in which learning takes place in informing and forming student behaviour also became clear. Many of the students at Slapton, for example, commented on how much they had learnt from the infrastructure and interpretation provided concerning sustainability – specifically energy and conservation. The informal opportunities for the centre to operate as an environment of learning seemed ample:

> *"At home, I leave the light on, and leave the shower running to shampoo my hair, I don't need it on. I think turning off, but then I like, I don't see the point because everybody else is doing. Everybody else in the area would be doing it. Like, I find it weird, but here I realise the amount people come here and how much water you must save. It's opened my mind a bit and made me think... Even though it's just you…it can make a difference".*

(Rachel, Slapton, Group J)

At Embercombe similar comments were made with respect to the community of staff and volunteers who worked alongside the school groups when they visited. Students recognised the opportunity to learn from being in a community-focused environment:

> *"Yeah, about this place, incredible. I can't believe how the community works here. How the community works together like this. I think it's inspiring for us to see as a class, like as a mini community to see".*

(Izzy, Embercombe, Group C)

In both locations, yet for different reasons, the residential setting itself become an informal place of learning with implications for the students' own lives outside of the setting. Students in both locations also described freedoms associated with

the places and spaces of leaning – including freedom to explore, walk around and spend free time away from adult supervision.

## 4.4 Conclusion

Much of the discussion in this chapter has focused on comparisons and contrasts between school-based and residential learning. This has provided interesting insights into not only the experiences of students within residential learning settings, but also into the relationship between students and their schools, teachers and home environments. Focusing on three main areas of interest – routines, adults and spaces of learning, this chapter has unearthed compelling acknowledgements of how residential learning constructs and challenges understandings pertaining to a variety of scales of relationship. Concerning itself with pedagogical and psychological strands of the literature, this chapter appeals to theoretical areas covering practices, behaviour and educational paradigms. Educational pragmatism, blended perspectives and social practices are relevant to the focus of this chapter as well as to the consideration of objectives 1 and 2. Where necessary, clear links will be made to literature and specific contributions to the objectives will be highlighted.

For students at both locations, arrival at the residential centre meant entering the unknown. This was true of the environment, but for many, it was also true of the rules and norms associated with the location. Students were unsure what to expect and coming away simply meant an extension of school time. However, as has been seen, for most, this was not proven to be the case -and although at Slapton many of the students recognised aspects of the structural routines and norms from school (such as regular 'classes', exam-focused work, and teacher-student relationships) there was a distinct challenge associated with both settings when compared to schooling. In the field, this was noted differently at Slapton compared with Embercombe. At Slapton, students recognised the setting to be an extension of the priorities of school, yet saw in the educational approach more emancipatory learning which led many students to comment on the didactic nature of formal education. For some, this was not the case, and Slapton simply represented a reinforcement of rigidity and authority associated with school. At Embercombe, the emancipatory nature of the programmes was plain to see, and constituted such a step away from instrumental learning that many of the students reflected upon the controlling nature of their schooling, in which marginalisation

of student voices was said to occur, paralleling critical examinations of the structure of schooling and institutional culture (Freire, 1970, Cialdini and Trost, 1998, Cialdini et al., 1991). To this end, the additional freedoms granted at both locations, on the whole, provoked a deep questioning of the education system and entailed a challenge to the norms and rules of school. From the vantage of objective 2 – focusing upon the narratives of residential experiences, this point comes into focus and suggests opportunities to 'see differently' educational conditions which are perceived to be normal.

Opportunities to see education differently was not only observed in the daily structure and routines of residential settings; the role of the educators and adults in these settings also prompted questioning of school based structures. While this was observed at Slapton, cultivated through comparisons and contrasts drawn between the residential experience and school – the effect of the experience on how students perceived their schooling was more pronounced at Embercombe. Whilst at Slapton the non-teacher adult was seen to be facilitative, although strict, and 'school-like'; yet Embercombe seemed to stimulate a deeper sense of questioning and an encouragement of challenge to authority. The result of this is demonstrated through student's comments regarding the nature of the school system and the injustices they perceive within it.

From the perspective of educational paradigms, this point is significant as emancipatory opportunities were seen to be implicit aspects of pedagogical approach. Although Embercombe represents a more free and open educational setting, adhering to principles of free-choice and experiential learning (Ady et al., 2009, Falk and Dierking, 2002), Slapton also exhibited aspects of emancipatory and free-choice learning when set in contrast to structures of schooling. Evident here then is a 'blended practice' approach to viewing environmental education within residential settings – whereby paradigmatic opportunities emerge form relationships within place rather than defined by educational discourses and pedagogies (Wals, 2010b). The pluralistic nature of educational experiences within residential settings was apparent as the traditional dualistically defined educational approaches took on their own meaning and significance in practice. This is not to say, however, that further opportunities to make use of contrasting educational approaches are not apparent; simply that their occurrence, in the case of Slapton seems to emerge in spite of pedagogy. From a social practices

point of view this is salient, as the learner's own typologies of learning, social norms and environmental understandings meet structures found at the place of learning (Spaargaren, 2003, Hargreaves, 2011). Making use of these observations, it is understood that a relational attitude was adopted by students taking part in residential learning. The culture of learning within the group was contextually mediated, emergent and subjective; supplemented, yet not defined by, pedagogy.

The role of adults in residential settings came up regularly in discussion, both with regards to teachers accompanying the school group and the education staff working at the setting. Adults were perceived in multiple ways by the students and differently across both settings. At Slapton, it was notable that students saw adults as authoritative figures who provided discipline as well as holders of knowledge to be imparted through their teaching. It would seem that there was a clear link between the instrumental focus of Slapton and the perception of tutors at the centre. At Embercombe the education team were often referred to using language which placed them as 'equals', precipitated by their educational approach which was associated with greater degrees of freedom afforded to young people by adults.

Although there are clear differences between the perception of centre staff, in both cases students commented that the educational approach seemed more facilitative in line with emancipatory approaches to learning than that which they experience at school, which in turn was linked to a stronger sense of motivation to 'get the work done'. At both locations the visiting staff were also seen to be 'more relaxed' and as equals within the learning community. In this way, all adults in both settings were presented and were perceived in a different light to the role adults take within their school settings. While this is perhaps not surprising and certainly from a place-based and community learning perspective, this is as much suggestive of the changed place and routines as it is to do with alternated adult roles in the setting, this point provides an important consideration of the role of non-teacher adults in facilitating environmental experiences (Sobel, 2004). In responding to objective 2, therefore, this point may be taken to suggest that narratives and norms are not only discovered, they are also shown and embodied through the practices of staff working in these settings (Woodhouse and Knapp, 2001, Smith and Williams, 1999).

The spaces and places within which outdoor learning and field courses take place have also been shown to be important aspects of structure which this chapter has discussed, not least through encounters with the unfamiliar. For many, a residential stay in the south Devon countryside represented something out of the ordinary, not least because all of the schools were situated in urban settings. As testified in their accounts, some students recognised the surrounding natural environment to be something to be marvelled at and to contrast to their home setting. This was often accompanied with descriptions of relaxation and escape from the stress of home and school. Taken in context of their occurrence, it is interesting to note the notion that 'being away' might be perceived to be more relaxing and comforting than 'home' – further supporting the post-structural assertion that home might be constructed as much of feelings, thoughts and associations, as with physical materiality or space (Kraftl, 2013), especially when taken alongside the notion of home being a place of sanctuary and nourishment (Busch, 1999).

From a non-representational perspective, the routines and norms of learning are constructed as constituents of their environment and not simple trans-locations of practice and culture from home or school. This point raises the proposition that the milieu of learning, encompassing physical environment as well as practices, are aspects of the relational perspective of environmental education in residential settings. Understood in Kraftl's (2013) terms, these relational settings produce 'learning atmospheres' in which emotion and interaction converge. Furthermore, places in this way can be articulated in broader terms than much of the place based literature currently enables – and in fact extends much further than place as location; into the emotional landscape of learning in association with the environment (Gruenewald and Smith, 2014, Woodhouse and Knapp, 2001).

The environment as a backdrop was seen in some instances to contextualise learning through encounters with the 'real world' and was conceived of as being good for the understanding of subject matter – seen at Embercombe through the idea of living and learning within a community, and a Slapton where the environment took on more of a significance as a living laboratory. So too, freedom in the outdoor environmental as seen as a complimentary facet of being at the residential setting, which was to be explored and where formal routines and

structures could be challenged and reconstructed – all of which can be said to have contributed to the learning atmosphere experienced by students.

While learning atmospheres offer new ways of understanding structures of learning and the ways in which they meet individual behaviours to emerge as social practices; this view is also relatively simplistic, as it crucially misses the important contribution made by the environment itself. While this chapter has focused its attention upon structural aspects broadly recognised as 'human' across routines, roles and spaces, it is necessary to recognise the role of other-than-human contributions to the learning atmosphere. Moving further from materialist approaches to structure, the environment might also be thought of as animate, living and co-constructive. In this way, the analysis of the spaces and places of outdoor learning lend themselves to a post-structural consideration, where the non-human world provides more than a simple backdrop to student experiences, but instead is a co-experiencer and reciprocal convener of practice (Harvey, 2014, Clarke and Mcphie, 2014). This theme will be returned to more fully in chapter 7.

This chapter has commented on the underlying narratives and conceptualisations of resindeital learning in association with institutional norms of school and the cultural associations of home. In doing so, the chapter makes clear contributions toward objectives 1 and 2. Linking with literature areas concerned with behaviour change and environmental discourse, including pedagogy, this chapter advances the theoretical contribution the thesis makes; namely, by bringing together a theory of social practices with environmental education, contributing toward a blended pedagogy. In addition, social practice theory offers the reader insight into the nuanced, subjective and highly pluralistic construction of experiences of resindeital outdoor education. Seen from a practices perspective, pedagogical approach constitutes only a small aspect of the so-called 'learning atmosphere', while emancipatory and instrumental approaches both occur simultaneously in response to the context in which learning takes place.

Finally, this chapter has highlighted fertile ground from which to further explore the relational ontological opportunities which constitute environmental education in this setting, contributing to both parts of objective 3. From a relational perspective, this chapter has considered learning as it occurs in response to the physical and material environment, and in doing so creates manifest

opportunities to move further into a post-structural space in order to explore and suggest ways in which environmental education might draw upon relational ontologies. This prominent aspect of the empirical investigation is highlighted further in chapters 6 and 7. Chapter 5 now moves on to consider the importance of choice in residential learning and the ways in which choice operates in such settings. Choice links with structure as new ways of relating to work, to each other and the environment are explored through differentiated pedagogical principles.

**Extracting timber from the woods using pulleys and the bringing of choice**
*Embercombe, 14th June 2016, Group D*

I went to the woods with the group which was to extract some timber using pulleys. We picked up all of the equipment that we would need from the green woodworking area and headed further up into the woodland where JC introduced us to two large trunks which had been felled some years previous. They were both oaks. "We want to get these out of the woods –they will make beautiful planks, but we've been advised that we can't take vehicles in here so we need to take them out to the track where they can be loaded onto a truck. How should we do this?" – We tried to move the trunk by hand. It barely moved. "So what other options do we have?" JC asked… "We could tie a rope to it?" a student responded. "What about if we use a pulley?" another said.

We had pulleys with us so JC stood back and allowed the children to explain how this might work – "we could tie a pulley to a tree and the other end to the log and just pull it out?"  - "okay, let's give it as go!" JC said. We began to work as a team to locate a suitable tree as an anchor, and then to fix the pulleys and ropes together as to create a mechanism for moving the log onto the track. Some of the students worked to clear the shrubbery away from the log. Once the pulleys were all correctly set up, the group pulled together on the rope while JC and I made use of metal bars to ensure the log moved past obstacles. The trunks seemed to move with relative ease and the pulleys ensured the group were able to work together to shift a load which would otherwise be impossible. Once the log was safely on the track, we moved the next one, with the help of a little oil on the pulley wheels. This time, however, JC gave the planning and preparation over to the children – "this is your chance to take control and do this for yourselves. You need to collectively decide how you are going to do this, and then work together to do it". With some help, they moved the next log with pulleys onto the track.

*Excerpt 5.1 Extracting timber from the woods using pulleys and the bringing of choice.*

### 5.1 Introduction

This empirical chapter makes use of findings from the field to discuss the ways in which choice operates in situations of residential learning. Choice here is seen to entail learners making decisions regarding a number of differing and intersecting concerns and options including learning approach, focus, involvement in activities and engagement. Choice operates on several levels from explicit invitations to 'choose', to more implicit considerations of involvement. Student choice is reflected in the activities they carry out in residential learning settings as well as the day-to-day activities. These choices are seen to be informed by a range of factors, not all bounded by the setting itself – indeed, many choices relate to prior experiences and further expectations. Neither do choices in these settings

operate in a vacuum, as individuals making choices often affect others in the group and so too the opposite occurs. The relational connotations of choice, therefore are apparent.

This chapter concerns itself with research objectives 1 and 2 (see chapter 1). In particular, it is clear that choice intersects and interacts with the environmental context in which it takes place, and that observations in the field support the contention that choice is an important and inherent factor concerning the lived experience of participants. Therefore, discussions on choice make themselves implicit to understandings of the environmental encounters of students taking part in residential learning (objective 1). Choice also makes itself apparent in any attempt to understand the construction of norms and rules governing experiences at residential outdoor centres. Greater freedoms, restrictions or challenges present themselves as outcomes of both pedagogical and situational choices. Understanding environmental narratives emerging from encounters with new settings as well as the norms which these entail (objective 2) therefore encourage a focus on choice.

As with the previous chapter, choice emerged as a level 5 code, and therefore a substantive code for discussion as an empirical chapter. Although presented here as a bound entity, it is important to recognise that the codes which underpin 'choice' as a theme, also resonate and interweave with the other substantive codes which form the empirical headings for chapters 4-7. Throughout the period of data collection and subsequent analysis, choice recurred as a theme; emerging in a variety of ways. At Slapton, choice emerged as a distinction between school and residential experiences of learning, albeit with a retained focus on exam outcome and assessment, while at Embercombe, choice was recognised in the more personal domain and articulated through discussion of freedoms and self-led approaches to learning and work. Both cases enabled a discussion of emancipatory possibilities of outdoor learning. Finally, the concept of meaningful work with a purpose was expressed by students in both locations as being an important factor in their coming away on residentials. This chapter begins with an overview of the relevant literature concerning choice in field-based learning before considering the empirical components of the study from the perspectives of the three areas highlighted above. The chapter ends with a conclusion.

## 5.2 Conceptual Context

Choice plays a large and important part in the practice and philosophy of education. For many years, the consideration of the choice and 'freedoms' within learning practices and environments have been gaining traction. So too, the awareness of potential for oppression to arise in pedagogical settings has been developed, not least by Freire (1970), but more recently others through the development of critical pedagogies (Darder, 2003). Oppression has been argued to be a precondition for an educational system which views its students as repositories for knowledge, rather than agents for change (Freire, 1973). It is argued that becoming agents for change in a fluctuating world requires a deeper understanding of context and situation, while enabling a development of pluralistic attitudes toward problem solving (Wals, 2007a). The deep critique of the education system's desire to homogenise skills sets and standardise learning is presented by Illich (1973) in his classic text 'Deschooling Society', in which he lays out a vision for a more emancipatory and open form of learning, freed from a formalised school system. More recent debates have picked up these radical threads and developed them in line with learning for a changing world, often associated with sustainability education agendas (Wals et al., 2008, Jickling, 2003, Wals and Jickling, 2002, Sterling, 2001). At the centre of these contemporary debates are considerations of instrumental and emancipatory learning approaches and outcomes within education – the first concerned with accumulation of knowledge and facts, often linked to assessment, while the second is allied with open approaches to learning, choice and student-led practice. The debates surrounding these contrasting approaches to sustainability education are outlined in chapter 2, however, it is appropriate to go into a little more depth into articulations of choice in learning, to give a greater context to the empirical material which will follow.

While the term and concept of 'emancipatory learning' has developed from the work on education and oppression (Freire, 1970), transformative learning (Mezirow, 1990b) and elsewhere, there are a number of pedagogical practices that have begun to develop which foreground the concept of learner choice and freedom in learning. The first of these practices is 'free-choice learning' – sometimes combined with ideas of lifelong learning, or unbounded learning, free choice learning is described by Falk (2002) as "the most common type of learning

in which people engage. It is self-directed, voluntary and guided by individual needs and interests… it involves a strong measure of choice over what, why, where, when and how we will learn" (p.9). Falk goes on to recognise that free-choice learning happens often informally – outside of the structure of schools and universities - and is undervalued as a legitimate and important form of learning. Falk also notes that people engage with free-choice learning "not so much for the purpose of learning facts and concepts, but out of a desire for personal self-satisfaction and relaxation"(Falk and Dierking, 2002 p.16). This learner-centred approach to education has been developed further in science education where scientific understanding derived not from formally taught sessions, but leisure time such as visits to museums, use of the internet and personal life experiences (Falk et al., 2007). While these findings recognise the need to pay attention to the uniqueness of personal experiences outside of formal education structures, it is also recognised that understandings of lifelong learning are still largely underdeveloped. Ballantyne and Packer (2005) consider the link between the informal spaces which outdoor environments offer, including those experienced on field trips, and the increased potential for free-choice learning to occur. In particular it has been observed that these encounters provide opportunities for learners to reconsider behaviours and attitudes toward the environment (Orams, 1997, Ballantyne and Packer, 1996).

Free choice learning is necessarily emancipatory by nature as it recognises the complexity, pluralism and lack of agreement on a 'right way' to learn – it is a learning which is context specific, spatially and temporally determined. It becomes necessary then to turn to the spaces of learning. Kraftl (2013) notes how processes of learning are often prioritised over spaces of learning, and suggests that educational practices are borne of the spaces in which they inhabit, while the materialism of space is reciprocally transformed through practices. Kraftl's approach is relevant here, not least because the outdoor environments in which this work takes place are seen increasingly as proprietary conveyors of meaning for learning to take place (Taniguchi et al., 2005, Davidson, 2001).

Opportunities for choice to emerge from experiences of residential and outdoor learning are further enhanced by the educational approach employed. Emancipatory learning is closely allied with place based learning, and community learning (Smith, 2007, Sobel, 2004, Woodhouse and Knapp, 2001). These

conceptions of the wider community and the local spaces as places of learning are connected with previously discussed principles of lifelong and free-learning. However, they retain a more explicit and driven aspect which enables them to be seen as a recognisable educational approach within more formal educational structures with links to curricula. Place-based education therefore is "the process of using the local community and environment as a starting point to teach concepts in language arts, mathematics, social studies, science and other subjects across the curriculum" (Sobel, 2004 (p. 6)). Place based learning from this standpoint offers a link between the instrumental focus of some field courses and the emancipatory desires of free choice learning, in line with the so-called 'blended approach' to environmental and sustainability education, where agency meets structure (Wals et al., 2008, Wals, 2010b).

The tension between an instrumental approach to outdoor and residential learning experiences, guided by assessment criteria and subject specifications, and an emancipatory approach in which learning is emergent from the spaces and practices of the moment is clear to see. However, as this chapter turns toward the empirical content, it must be said that the realities are far more complex and nuanced than the theoretical work might account for. With this in mind, we delve into the experiences and commentaries of students taking part in these realities in the field.

### 5.3 Empirical Analysis

The discussion of choice focuses on the tensions between instrumental learning approaches and the positioning of emancipatory opportunities emerging from time spent in residential and outdoor settings. Developing from this dualistic positioning of educational priorities, the discussion then turns its focus toward student's desires, understandings and discussions of purpose, meaning and legacy in learning. Rather than set instrumental learning up as a straw person to be torn down, the analysis strives to find a middle ground inhabited by the experiential nature of learning in different spaces, using alternative approaches and under unusual structures offered by residential settings. It is the authors hope, therefore, that the reader will gain an appreciation of how elements contained in other empirical chapters coalesce to bring an experience to life where choice is mediated, enabled, and sometimes constrained by a variety of facets of field-based residential learning.

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**An introduction to ecology**
*Slapton, 20<sup>th</sup> June, Group I*

During the evening introduction, Sam (the Tutor) introduces the ecology programme for the week. "What does ecology mean to you?"… Students go outside to find something that represents ecology to them and draw it. Some come back with drawings of leaves or animals – "Ecology to me is more about the interactions", Sam explains to the group. The group are then introduced to the key terms for the week back in the lab.

A definition of an ecosystem was then built up with more key terms being uncovered as the session progressed. Sam began questioning some of the students about their knowledge. At the back the teacher was on her laptop. We then moved on to look at various sampling strategies before going back outside to take part in an activity in which we made use of open and gridded quadrats. The teacher didn't follow. Sam explained "this is a field course, and while there will be some indoor work – the majority of it will be outside".

On Tuesday, Sam gave an intro to ecosystems including energy and nutrient cycling, key terminology and processes were also covered. We then applied the new knowledge to a freshwater ecosystem and looked at a variety of different habitats within the ecosystem, e.g. sediment, bed, surface, reeds, rock, water column. "These are all good examples of microhabitats – today we will be looking at pools and riffles", said Sam.

</div>

*Excerpt 5.2 An introduction to ecology.*

### 5.3.1   Instrumental Learning

Throughout the fieldwork, instances of what are recognised as 'instrumental learning' presented themselves in various forms and across both case settings (although these examples were more clear at Slapton for reasons which will become clear). Instrumental learning was occasionally referred to with reference to activities and work undertaken at the residential setting itself, but often in association with school-based learning, and through comparisons between the two locales. As such, the topic of instrumental learning meshes and resonates with that of structure (see chapter 6). So too, instrumental learning, especially when referred to through comparison with school-based learning settings is associated with emancipatory approaches to learning. This section focuses on the instances and ways in which instrumental learning became a component of the observed nature of learning at residential settings.

*Photo 5.1 Students carrying out river channel measurements at the source of the River Lemon on Dartmoor (author photo, Slapton, Group H).*

For many of the students taking part in learning at Slapton, instrumental learning was the rationale behind the field trip, as articulated by Suzy, a teacher accompanying one of the groups:

> *"Students always learn better when they come to Slapton. They always seem to come back full of ideas and inspired by what they have seen and done – they appreciate the exam questions and it's easier to guide them through the material after coming here. I think it sort of, contextualises the material for them – it's important for their exams".*

> (Suzy, Slapton, Teacher with group F)

The notion of contextualising of learning was also recognised by students themselves:

> "I think it improves what we've been taught. Because when you been taught it, you don't always like, think it will happen every time… It's good to go out there and actually see that it is happening".

However, not all of what was learnt at Slapton was seen by the students as valuable to them just because of the need for attainment in assessment, as discussed by Sammy:

*"I guess learning so many new things. Not necessarily to do with our specification, and A levels, just little facts that our instructors are telling us about what he sees. It's quite interesting".*

(Sammy, Slapton, Group I)

In this way, the knowledge of the instructors was seen as important for the developing of fact based learning. While the wider aspects of experience were clear to see, visiting teachers often took on the role of enforcing a knowledge-centred approach to outdoor leaning, often citing contextual benefits of place based learning:

*"If a question does come up, Miss said that [students from the school] always answer it well because they've done the experiments and they know, they remember it and they know how to answer it properly".*

(Fay, Slapton, Group I)

*"I also think the fact that we were there … when we do our exam it will show through our writing that we were there. Miss was saying on the bus that if we had the chance to mention that we can use the roads because it was eroded, and we were taken to the car park to go to a place that we needed to go, the examiners are going to realise that we were there and we are going to have a clear understanding of its importance. So being there rather than a lab, it is going to make sure that we understand it in a lot more greater detail".*

(Cai, Slapton, Group G)

*Photo 5.2 A tutor talks about storm damage to the sea wall at Torcross (Slapton, Group G, author photo).*

While clearly demonstrative of the well-trodden belief that outdoor learning, specifically field trips hold value in the way in which they contextualise knowledge for students, they are also indicative of the role of the teacher in formulating and essentialising the nature of residential experiences. In each of these cases, the belief in the contextual value has been mentioned by students in response to what their teacher has told them.

However, contextual based arguments for the importance of the experience for instrumental learning were also arrived at by the students independently of their teachers on many occasions:

> *"When you're revising you just have to see things as concepts that you have to learn… It was super interesting seeing them as an actuality that has an effect on real people, because you know it, we don't really think about it that much… Because you just have to learn it".*

> (Farah, Slapton, Group G)

**Opening the lime kiln; unleashing energy**
*Embercombe, 29th April 2016, Group B*

I woke after not much sleep early in order to make my way down to the Linhay to meet Ro to begin the cooked breakfast. The students were sleeping in the Linhay had just begun to wake up as we began the preparations, and slowly the noise levels in the room crept up. Over the next hour we provided everyone with a cooked breakfast of eggs and potatoes which was received very well. Following this we met as a group in Story Fire and held a check in. Nearly all of the students commented that they were tired and looking forward to going home. JC commented "you have all contributed a huge amount of your energy this week, you've poured it into the work which you have done and you have all stepped to the edge in many ways. It will take some time for the experiences of this week to sink in".

We went to the lime kiln and one of the students made a hole at the bottom of it with a pick axe to take out the quicklime. The limestone had transformed into a light white rock – still in the shape of the original rock but substantially lighter. We took some over to as table and the students gathered round. Slowly JC poured water onto the quicklime, which began 'soak up' the liquid – "we did all that just to make a thirsty rock!" one student shouted. JC poured more water on, and then some more, and the rock readily soaked up the liquid. Eventually a crack appeared in the side of the rock and the students watched, transfixed… "Listen" said JC – can you hear that? The rock was hissing. Then steam began to rise off… "Put your hand close" he said – and the students felt the heat rising from the now disintegrating rock which had begun to resemble a pile of ash. "Put the whole rock in the jug!" shouted a student excitedly. "Soon – have patience" said JC. We moved over to the kiln again and JC spoke about the properties of the lime – "so this is Calcium Carbonate" he said, holding up a piece of the quicklime… "And it is incredibly unstable. What have we done to it?" --- heated it up!" replied one of the children…. "That's right – and we've driven off the carbon – watch this". JC proceeded to tip some of the quicklime into a large metal dustbin filled with water. The bin began to bubble. At first gently and then gradually more vigorously until the bin was visibly vibrating. An exothermic reaction had begun. The students gathered round to observe as the bin bubbled with milky white liquid. Then steam began to rise and the outside of the bin became hot to the touch. JC explained the reaction … "so, the carbon has been driven off leaving $CaCO_3$ – when we add water, what happens? "

The conversation proceeded in this way, and while he spoke, Jo painted the chemical formulas and the process of the lime cycle on an upturned table with a paint brush using the lime wash which had been created in that moment. He explained that lime wash can be used for lots of things and that the linhay would be painted this summer with this lime wash. A component of the cycle involving the recombination of carbon with the calcium hydroxide was missed out and was left to be picked back up at school. The students, although clearly tired, were mesmerized by this whole process. Jo's words ran though my head from the night before – "it's their energy in there –they created it".

*Excerpt 5.3 Opening the lime kiln; unleashing energy.*

While instrumental learning was indeed foregrounded at Slapton as a way of being in that setting, i.e. learning with the goal of preparation for examination, at

Embercombe it took on a different significance. Instrumental learning at Embercombe was largely signified as a comparison between the ways in which students recognised the learning at the case location and their school settings. Many students commented on the ways in which learning typically takes place, recognising a contrasting way of learning in this setting:

> *"I like the way you learn here, because when we built the lime kiln we can say we actually took part, rather than everybody doing the same worksheet, and everybody getting the same answers or getting it wrong or right. With the lime kiln we helped with that, everybody helped with it. We can say, we all made that".*

> (Anna, Embercombe, Group D)



*Photo 5.3 Students puddle clay mixed with sand and hay with their feet, to make cob mixture for construction of the lime kiln (author photo).*

Some expressed their frustration at the seemingly fleeting importance of exam focused ('paper') learning:

*"Also with the paper, you kind of get it right, then you remember it for like two days, and then you completely forget about it. But then, if you make something here, not just the lime kiln but anything really it's kind of there, and you don't really forget about it easily. Paper just gets thrown away. But then, if you help in the garden, or somewhere else it stays there and doesn't go away and then people can come and see it… But paper you don't, it gets thrown away".*

(Nydia, Embercombe, Group D)

These expressions concern themselves with another component of analysis linked to choice; the desire to be part of a lasting legacy, or project, which holds meaning for the learning community. The chapter returns to this notion later on. In making comparisons with school, some students directly focused their attention on the adults and how they determined the type and approach to work:

*"It is good that we do tasks… That we do these things and the adults here genuinely care how you are doing and how you're feeling. Back at school all they care about is exams, whether you're going to get through… The adults here genuinely care how you're going to do later on and not just think of it as just a job."*

(Adam, Embercombe, Group D)

Academic attainment at school was also linked to choice, or rather the lack of, by some students who discussed the influence on their subject choice:

*"You don't get much choice until you become older. I wish you could get more choice when you're at a younger age. But when you do become older, or something, I would rather it if you could choose a subject that is what you need for your qualifications, rather than ones you don't really need but you have to take them because you wouldn't get a job if you didn't have them – maths or English qualifications. I wish you didn't need those to get a job".*

(Kendal, Embercombe, Group D)

Here, wider implications of choice and instrumental ambitions of schooling are picked up, as the need to attain in certain subjects is linked with getting a job. In particular this aspect of discussion seemed pertinent to the Steiner educated

students at Embercombe who talked about feelings of not being prepared for further study:

> *"I feel quite stressed at home because I'm moving school and I've been at Steiner pretty much my whole life. I'm moving to a state school. I'm thinking about the fact that you get a lot more tests and a lot more homework, and more hours and stuff. I'm kind of preparing myself for that… So I got extra books and stuff that I'm reading".*

<div align="right">(Ryan, Embercombe, Group D)</div>

Adam added to Ryan's comment;

> *"I realise the level of maths and some other subjects is a lot higher than what is in some Steiner schools and is a lot more tests and things… So I have to revise a lot and that takes up a lot of my free time".*

<div align="right">(Adam, Embercombe, Group D)</div>

A final aspect of instrumental learning, which some students touched upon, intersects with structural elements of learning (see Chapter four). At Slapton, in particular, some of the students drew comparisons to school based learning with respect to the routines and pressures placed upon them:

> *"The whole atmosphere is like, you're in school, you know I mean? I know that it is educational, but the fun side of it is…"* [Tailing off].

<div align="right">(Ahmed, Slapton, Group F)</div>

Mark continued along the same lines of thought:

> *"How we have like deadlines for everything. Everything is like, right you've got this time to do this then you got a lesson, and this time you have dinner and after this you've got a lesson and then you got two hours free time… It's too like, intense".*

<div align="right">(Mark, Slapton, Group F)</div>

In Ahmed and Mark's comments it is clear that the structural constraints common to and recognised as part of 'schooling' are creating challenge for the students. Whether this is because they felt that the expectations at Slapton were different to those at school or that they represented an 'intensification' of those same

experiences remains to be explored. However, what is clear is that a conflict arose between the structural setting in which the students found themselves and the instrumental outcomes which were being pressured – manifested in long hours, 'lessons' and a clear distinction between work and free time.

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**Arrival at the field centre and a pilot study on the beach**
*Slapton, 15th March 2016, Group G*

We gather at the equipment shed and meet students who have been busy getting on warm clothes ready for an afternoon visit to the beach. Equipment is already laid out on the low wall by the shed and once all of the students have arrived, the equipment is divided out to the groups. Groups are decided by the teachers who have a paper copy of predefined groups in order "to mix them up and to challenge them". It is clear that normal friendship groups are split as students find out who they are working with. We take the equipment and begin to walk to the beach. On the way down I overhear two students talking about the walk – "look its miles – it must be like 20 miles! it's so far to go!!"

When we arrive at the beach, A introduces the study location as students take a seat on the shingle in the sun. A cold breeze blows which counters the warmth of the sun. Landforms and process are introduced and the students draw a field sketch. The teachers are attentive and circulate and comment on sketches. A says "sketches are good fieldwork skills, to be a good geographer you need to be able to field sketch". I speak to the teachers who say about the familiarity of the beach to the students "some of these kids don't go to the coast – you can't get much further away from the coast where we are".

Processes are now introduced more fully and mention is made of the previous storms and high tides which have affected the back of the beach. Students begin to ask questions about locations and develop understanding of the field site. A splits the students into 2 groups, one discusses the possible fieldwork techniques for investigating processes, the other discusses how we can evaluate the management techniques found tomorrow. After a short amount of time the students feedback their discussion points. The ideas of students are commented on by A who develops them in more detail and gives clarification.

Beach profiles are practiced using dumpy levels and groups begin to work independently with a good level of focus. I spoke to the teachers who told me "the social aspect of the trip is important – some of the kids won't have mixed like this before. Some of them have social groups and don't talk to the others".

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*Excerpt 5.4 Arrival at the field centre and a pilot study on the beach.*

At Slapton the emphasis for many of the A-level students was on the practical aspects of the field trip. These practicals made up a component of their assessment, and as such, provided the impetus for taking time out of school to attend a field trip. Indeed, it is a statutory requirement at the time of writing for

geographers to spend time in the field. For some of the students, this opportunity to try out learning in an applied way in the field opened choices up – contrasted with the more controlled and structured approach of schools:

*"And in school when we do practicals we have a sheet of paper, it has a method on and has equipment list, or something like that, but thinking for your own, you don't realise how much you do need to think about all the little things when you're doing it. You just go oh, Miss said this and I will just do that".*

(Lizzy, Slapton, Group F)

For others, the choices presented through the individual practicals arose as a challenge – possibly due to the assessed nature of these exercises:

*"I found that difficult, it's quite hard- -I found it quite daunting, when someone says - independent work. For me, personally because I'm always relying on people. I can think of things for myself but I like to be reassured by other people, like, me personally. So, when he said- its individual investigations thing, I was like, 'oh no'… because I just think I'd have a much harder time doing something completely different to everyone else".*

(Billy, Slapton, Group F)

*Photo 5.4 A tutor demonstrates the use of equipment for examining infiltration rates during a hydrology practical at Slapton (author photo, Group E).*

Instrumental learning then, was discussed by students both as a way of contrasting their traditional ideas of education – through their experiences of the schooling – with the residential setting they were learning in. For those students at Embercombe, this was normally seen to be different and distinct from experiences of school, which held a more formal structure, whereas at Slapton, occasional aspects of the residential resembled school for some of the students. However, many of the students at Slapton commented on the changed nature of their relationship with assessed work at Slapton, reporting increases in motivation and interest in the subject matter, and developing new understandings and knowledges. Also, at Slapton, the individual practical element common to many geography and biology programmes provided additional components of choice within an instrumental curriculum-driven programme. The result of this was varied. For some it provided a much needed freedom to develop their own work, while for others this proved to be daunting and too much of a departure from the structure of their schooling.

### 5.3.2 Emancipatory Learning

**An arrival and a tour of the land**
*Embercombe, 24th April, Group B*

The group eventually arrived at 4pm and were led to the top of the mound by JC. We sat in a circle and JC gave a brief overview of the week. The group were excitable and high energy. They had been to Embercombe before, the previous year, for two nights as a means of bonding the group. They were concerned with what the week would hold and in particular they held a set of concerns related to food and comfort. The rope swing in the woods also featured– many of them remembered it – but JC explained that it had since been 'condemned' to which the students responded disappointed. JC asked each member of the group to say their name and what they would like to get from the week. Most of the children simply copied what had been said previously, but those who did choose to air their thoughts focused on the food – "I just want to eat tasty food – I hope the food isn't horrid", or their comfort – "I hope I can sleep", "I don't want to go home ill", or "I don't want to be cold". The engagement of the group at this point seemed superficial, and it was already becoming clear that the group as a whole have a number of issues listening, although much of this is probably due to excitement.

Once we had finished the introduction we began a short tour of the land. First we visited the sheep which had recently lambed. The students were asked to quietly make their way into the enclosure before the lambs came out – only a few days old. Next we went to the well house. The students then had a chance to sample the well water which many of them did, although a small number were very suspicious of it. One child filled his water bottle twice. After this we went to the woods and looked at the work which had been done in there. It was much drier under foot than the last time I was there. We looked at the coppicing and the planting done by previous groups and then we went to look at a large fallen birch tree which JC told the group would have to be moved up to the road in order for it to be planked – "this wood makes great furniture – but we need to get it to the road… can we lift it?" we tried to lift it twice and only succeeded in shifting the trunk by an inch or two… "How are we going to do this?" JC asked – "with science – ropes and pulleys!" a student responded…

We then walked through the woods and found evidence of the land having been used for farming – wire running through the trees. The next part of the story emerged when we visited the Linhay – constructed of chestnut from the woods we had just emerged from. Down at the lake JC explained the precautions of using this area – "you must come down here in twos or more – never on your own- but you are welcome to visit the lake". Finally we finished the tour with dinner in the Linhay.

*Excerpt 5.5 An arrival and a tour of the land.*

Across both of the case settings, learning was recognised by students as providing opportunities for developing choices. The previous section looked at how this was manifested or even prevented through the presence of, and contrast to, instrumental learning. In this section, the chapter turns to emancipatory learning approaches prevalent at the case locations. Connecting with objectives

one and two most clearly, the discussion on emancipatory learning uncovers aspects of student experiences during residential programmes which concern changed routines, challenge to social norms and approaches to learning – all of which coalesce to provide insight into how socio-environmental experiences are shaped in this context.

Most explicitly, emancipatory learning was a distinct facet of learning at Embercombe, where choice and freedoms were talked about. Emancipatory learning at Embercombe became an aspect of how students navigated the site, how they related to work and how they viewed their home and school lives. Speaking with reference to the freedom to explore the site and how they use their free time, one student commented:

> *"I quite like that we are more outdoors. The staff are friendly, and they are quite open to you. It's quite a big site… You have your own freedom to walk around. Here in your free time you can have showers, or you can go anywhere. You don't even have to ask to go to the toilet. Usually the answer is yes and not no".*

> (Heidi, Embercombe, Group B)

Another spoke about the way in which space is used at school – with restrictions on the use of outdoor space and activities:

> *"Yeah, I don't think it's like prison at school. But, we don't have that much time in the breaks. It has increased recently. By the time you've eaten, you go out and think 'what shall I do?'. A lot of the games have been banned because we have limited space. If you go out there and you want to be running around, you can't because there isn't enough room. That is the main thing with a lack of freedom".*

> (Elsie, Embercombe, Group B)

*Photo 5.5 A view of the Embercombe orchard, with the Linhay beyond (author's photo).*

In addition, at Embercombe, the living situations entailed a heightened degree of freedom for the students, as well as responsibility to carry out tasks such as lighting fires in their yurts, and looking after with own space without adult supervision:

> *"I enjoy being given the responsibility to stay in our own yurt with no adult. Making our own fires and everything".*

> (Lilly, Embercombe, Group B)

> *"I was quite surprised that like, because at school, we are sort of treated our age, but it's a bit like… Yeah, but I was surprised at how you let us light our own fires, and we were able to be responsible and do our own thing".*

> (Sam, Embercombe, Group C)

The freedoms associated with work were also largely commented on by students, who recognised the implications of working based on personal motivation, rather

than being told what to do, and once again this was often contrasted with the type of learning occurring in a school environment:

*"You remember things easier if you enjoy them. If you're being more forced to learn and write down this compared to like, if you like want to build the lime kiln, or move this tree, then I think you are going to remember it a lot more… I get distracted quite easily, and find it hard to concentrate so it's much easier to… concentrate. It's not boring".*

(Howard, Embercombe, Group D)

Here it is clear that there are distinctions being set up between emancipatory learning (recognised in the activities available at Embercombe) and instrumental learning (commonplace in school based learning). While this is not surprising, this recognition prompts an exploration of the responses of students learning at Slapton, where a more recognisable school based routine is prevalent. As has been discussed in the previous section, some of the students found the structure of Slapton too reminiscent of school, while others found the independent nature of work there daunting. Yet, despite this, many of the students learning at Slapton found the emancipatory nature of work rewarding and refreshing:

*"… in the classroom we just can be taught the same thing. I like that people are doing different things… it's not as structured, it's not like at this time we do this. I guess it's more like when you're ready, when you're done you can do what you want. You have to get it done and stuff".*

(Oliver, Slapton, Group F)

Ahmed continued:

*"Yeah, I feel like if it's our own work… It's not like the teachers have told us to do it, it's like, we've chosen what we do, and we're doing it together… We want to improve our investigation, to prove a hypothesis and stuff".*

(Ahmed, Slapton, Group F)

*Photo 5.6 "Everything before it was only there to contextualise it and lead up to it. It's really important that we did it all, but I felt that it all lead up to the practical work itself. I found it really interesting, [the equipment] is cool to use… things look really cool when you look through it. It looks like a Wes Anderson film" (Slapton, group J, participant photo).*

Its seems that at Slapton, for some students at least, the independent model of learning, in spite of the instrumental overtones of the trip, provided a touchstone for a more rewarding way of relating to work outside of the structure of school.

**On the river**
*Slapton, 7<sup>th</sup> March 2016, Group H*

We got to Lemon Head (the source of the river) on Dartmoor after an hour's coach journey – it was very cold – or at least a couple of degrees colder that at the field centre. The students seemed well dressed but as we engaged with fieldwork, I noticed some of them becoming quite uncomfortable with the cold, especially cold hands while sampling in the river channel.

Claire (the tutor) introduced the site and the source of the river and asked students to name features at the source before introducing the fieldwork techniques and sampling strategies. Before carrying out channel measurements the students were asked to do a field sketch of the source. Improvements to the sketches and additional features were added through questioning and suggestions from Claire. Links were made to processes and features present and already discussed. The students were already feeling the cold; "I can't write with my hands all cold, my hands are freezing"… "I feel like the wind's coming straight through my coat".

In the river, the techniques for measuring the river channel were introduced. The teachers stand separate to the group. When Claire puts her hands in the water, the group exclaim – "cor, I bet that's cold!"… "I didn't bring a towel!" The methods were explained and the correct way of measuring the variables were developed through teacher and student dialogue as Claire guided the students towards a set of determinable and comparable methods.

As the students began to collect data, I walked between sites and noted that the students were working well together and were highly focused despite the cold. Some of them struggled with some of the measurements – "we're having trouble working out depth in meters", another student had a concern for the river bed as she removed stones to measure them; "we're literally messing up this whole river". Students continued to have trouble with the cold as time went on and complaints grew in number and frequency; "my hands are so cold I can't do up my bag" one student said.

We had lunch before boarding the coach and travelling to Yeo Valley. We walked down to the river to find a faster flowing river with a large meander. "Can I swim?" asked one of the students when she saw the meander. It was much warmer and sheltered here than up at the source. In each group it appeared that one or two take more active roles in getting into the river, while others hang back although all are involved in aspects of the work. At the third site, Bradley meadows, the students were now well practiced at their work, but were becoming more playful and silly. More and more students started to get wet as the river got deeper. Over half of the students got wet feet… a number began complaining of the cold, but even so got on with the work and collected a full set of data, bar a set of bedload data by one group. There was a sound of conversation, excitement and commotion… amongst the exclamations of "it's so cold!" I hear a student proclaim, after just falling in, "This is brilliant!"

*Excerpt 5.6 On the river.*

*Photo 5.7 The tutor demonstrates channel measurements at the source of the River Lemon (author photo).*

Meanwhile, at Embercombe, ideas of responsibility and 'becoming adult' were brought to the fore in discussion about work and freedom. These issues were also often spoken about in relation to the adult teachers and facilitators on the programme:

> *"It feels like there is more responsibility which is good. It's your own responsibility to make your own fires, to do things… It feels like we have not been 'cared for' as much, but we can take matters into our own hands. It just helps having someone who respects you. I really like how everyone sees you as equal".*

> (Lester, Embercombe, Group B)

> *"I think at school the teachers keep themselves separate kind of, and here the adults treat you almost as equal. They don't think oh, here's another stupid kid to mess up stuff. So I think that's really nice".*

> (Nydia, Embercombe, Group D)

This same sentiment expressed by Lester and Nydia came through in discussion at Slapton – as summarised here by Anna:

> *"The teachers at school treat you a lot more like students - But here they are teaching more like we're adults. They talk to you. At school you ask and the teacher may give you an answer. But here, they make you think about it".*

> (Anna, Embercombe, Group D)

The relationship between students and adults in these learning settings will be commented on further in chapter seven, while the role of structure in the experiences of young people learning in these settings will be explored in more detail in chapter six. However, it becomes clear that any discussion concerning choice in outdoor and residential learning is intrinsically linked to the issues of structure and relationships on a variety of levels. The contrasts provided by these settings, as well as the challenges these contrasts hold in terms of routine, norms and structural provisions, all sit at the forefront of student experiences while taking part in residential learning. So too, the nature of the relationships which are present between students and adults challenge and disrupt the previously held views of students concerning the role of adults in education settings. As has been discussed, many of the freedoms commented on are related to the role of adults as 'facilitators' rather than teachers – the latter being a title which is linked to hierarchy, control and oppression by some of the students who took part in the focus groups. The role of adults in creating spaces for emancipatory learning to take place, even alongside, or as part of a blended approach to instrumental learning (as is the case with Slapton), is paramount. Adults as facilitators are positioned to mediate between control and freedom, or guidance and choice. This aspect of experience was keenly picked up by students in both settings:

> *"I like the way the teachers did it here, it wasn't like they told you what to do. We had a facilitator and a helper… One person was there to get materials, the other person was there to solve any problems, or help in any way... it's more 'supervising independence'…"*

> (Sonja, Embercombe, Group A)

The term 'supervising independence' seems to sum up what for many students was a different way of working with adults. However, there wasn't always a distinct contrast between school and the residential way of work – some students commented on the freedoms afforded to them at school:

> "I remember when I was a lesson once, I think it was history. Our teacher had had a lesson plan and we came and said 'we don't want to do this, we just want to talk and we will discuss this'. Yeah, okay we can adapt that, and we can shift depending on [our] feeling".
>
> (Colin, Embercombe, Group A)

So too, some cautioned that a greater degree of freedom doesn't suit everyone. In particular a group of Steiner educated students at Embercombe talking about their schooling in preparation for A-levels voiced concern:

> "It's tough. I think it's very hard to find the balance. Some will want to do the academic work more and will want to get better A-levels so the teachers have got to facilitate that, and they've also got to facilitate the people who aren't necessarily that interested in the grades… The crafts and things. Yeah. It's a hard balance".
>
> (Sandeep, Embercombe, Group A)

> "I think sometimes the balance isn't there. Sometimes I felt a little bit like with exams I wish I'd had more of a push. I know, at the time trying to avoid people, you know getting on my case, but sometimes I wish somebody would push me a bit harder… Because I might need it".
>
> (Leah, Embercombe, Group A)

*Excerpt 5.7 Talking with students about Steiner Schools.*

### 5.3.3   Meaningful work and legacy

Within the discussions surrounding choice and freedom, often the topic of meaning through work, motivation and the concept of 'legacy' emerged. This final section of the chapter draws out the ways in which learning at both Slapton and Embercombe became associated with meaningful work and legacy. At Embercombe the work was often talked about as being 'purposeful', or meaningful, and held significance which went beyond the learning of individual students and out into the community and wider ecosphere, taking on metaphysical and intrinsically valuable dimensions. Students at Embercombe were thus encouraged to think about their work in this way – whether building a cob oven, or picking vegetables for dinner – the work had a wider significance. At Slapton the work largely remained focused on the individual and seldom was connected with wider conceptions of community or place, perhaps with the exception of collaboration of data sets. This is not to say that the work at Slapton didn't hold a wider-than-self significance in terms of the content of the programme, rather the work done by students retained an instrumental fixation. However, despite these rather disparate conceptualisations of learning at each location, the comments of students on reflection resonated with each other remarkably well. As has been discussed, students at both locations reported a

feeling of enlarged freedoms and choices in their learning, and at both locations the structural routines of home and school had been disrupted. Here, the conceptualisation of work in terms of its meaning are explored in the comments of students from both Slapton and Embercombe.

While this sub theme is largely emergent of the discussions held with students and subsequent coding and analysis – it also connects clearly with objective two, concerning the social norms and structures of residential and environmental education. Legacy and meaningful work are wrapped up in the subtext of what environmental education offers students taking part in these programmes –and therefore intersects with other themes such as structure in painting an important picture of how residential and environmental education programmes shape student's experiences through participation and choice.

During the class 12 conference at Embercombe the students were involved in constructing four fire pits with stone hearths. The students spoke about their feelings regarding the work:

*"It is for quite a good cause making this. Seeing the end result makes you feel proud… Like, I did this… I helped towards it. It's a good feeling".*

(Sandeep, Embercombe, Group A)

Another added:

*"It's something for other people to use, and we made it. We are helping people… "*

(Colin, Embercombe, Group A)

*Photo 5.8 Celebrating the completion of the fire pit in West Village, Embercombe (author's photo, group A).*

Here, a sense of pride and achievement in the work they had been involved with was evident – and clearly articulated was the acknowledgment that their work had a significance beyond the time that they would be at Embercombe – that it would be enjoyed and used by others.

Elsewhere, at Slapton, I witnessed a similar response to students engaged with ecological sampling exercises. In this case, the students had been down to the rocky shoreline at East Prawle and were investigating the tidal tolerances of algae and animals in rock pools. The data that they collected was then uploaded onto a public database to be used in further analysis for evidence of climate change. The students commented on the 'big picture' understanding that this form of contribution enabled:

> *"[Our] data is actually put into a database. That means I actually get to see it from a bigger picture. I think allows me to remember it more as well… It allows you to actively contribute toward scientific understanding however small it is".*

Another commented:

> *"It feels like we are contributing towards helping to protect the coastline just by helping to understand it…"*

<div align="right">(Hamid, Slapton, Group G)</div>

Cast in a different light to the building of a fireside by the Class 12 conference students, the deeper level of meaning achieved by connecting the work students engaged with a 'bigger picture' was evident here.

Meaningful work intersects with the development of choice in learning where students are enabled to make decisions based on their passions and interests, such was the case at Slapton at the end of a coastal processes day in Start Bay;

> *"If you do experiments that are similar in a lab and are not in the real environment, I don't think it would have the same significance when you're doing the experimental investigation that it did on location and having seen why you need to study the beach itself and how it works and how it changes in order to figure out how best to protect it. I thought this made it more important to me".*

<div align="right">(Farah, Slapton, Group G)</div>

Many of the students linked the choice to be involved with something that has a greater significance for them with a greater degree of motivation for the work:

> *"I like it when you got an end result, or you can step away and think yes done that-I've made this, or I created this. I could take it and show it to someone. It's there, and you got results".*

<div align="right">(Lilly, Embercombe, Group B)</div>

*Photo 5.9 Students examine a freshwater sample from Slapton Stream during their independent investigation day (author photo, group I).*

While students felt motivated when they were enabled to work in ways which held meaning for them, it was also important for them to feel like they had chosen to do the work themselves – that ownership had been taken for the work. Speaking with a group of girls carrying out ecological sampling in Slapton Woods, these aspects were discussed:

> *"I feel like if it's our own work… It's not like the teachers have told us to do it, it's like, we've chosen what we do, and we are doing it together… We want to improve our investigation, to prove a hypothesis and stuff".*

> (Kirsty, Slapton, Group F)

Another commented:

> *"We've chosen our own project, made our own method, and tested what we want to test specifically. And it makes it more personal, and it makes you actually want to complete it for yourself because it's your own investigation, your own question that you want to answer and find out".*

It's in these sentiments expressed by A-level students in Slapton Woods that we find the importance of choice in developing meaningful learning. The idea that this is 'personal' speaks to conceptions of ownership and recognition, as well as motivation and pride. At Slapton this was plain to see in the ways in which students talked about their independent investigations, while at Embercombe this came through in the responses to larger group projects, such as the building of the lime kiln, with wider significance and long-lasting impacts. So too, the work at Embercombe often carried significance expressed as wider than-self thinking:

> *"I feel good because I've not just been doing it for myself; I've been doing it for other people as well. It pushes me to do more..."*

<div align="right">(Ollie, Embercombe, Group D)</div>

This concern for others which manifested through work will be explored further in chapter six.

## 5.4 Conclusion

This chapter has discussed the various ways in which choice occurs as an aspect of residential outdoor learning. The discussion has focused on choice as a mediator of experience as well as more deliberate learning in each location. The chapter has provided further descriptive quality and context of environmental outdoor education in a residential setting and a basis from which to consider relationships with the natural environment and context for considering objective 1. Focus has also been provided regarding the pedagogical mechanisms pertaining to sustainability. Learning approaches have been examined through the lenses of instrumental and emancipatory learning, while the emergence of meaningful work and legacy have also featured as important facets of this debate – creating important links with objective 2 and 3. This concluding section brings together the contributions the chapter has made toward responding to these objectives while creating links with the literature which underpin the empirical observations.

It is clear that the two case locations differ markedly in terms of their adherence to the philosophies of education around which this chapter has been structured;

Slapton aligns itself with a focus on instrumental learning while Embercombe makes explicit use of emancipatory approaches. It comes as little surprise then to find that students and teachers at Slapton made reference to assessment and examination as being the main rationale behind them coming on field courses – with teachers regularly reminding students of the usefulness of these experiences and knowledge in the exam, and students commenting on the contextual qualities of such experiences. In this way, the experiences of students learning at Slapton partly resembled place-based pedagogy in that the learning was further contextualised and enhanced by first hand experience (Sobel, 2004, Woodhouse and Knapp, 2001).

However, students also commented on the wider aspects of their experiences, citing the environment, social elements of the trip, and challenges they faced, bringing into focus free-choice learning occurring alongside curriculum focused experiences (Falk et al., 2007, Falk, 2005). In part, this was provided by tutor enthusiasm and knowledge of the 'beyond-the-specification' interests they brought with them, commented on by students who felt they were learning more than simply what was needed for the exam.

Visiting teachers as well as students made use of experiential and contextual learning ideas to demonstrate the usefulness of their experiences for wider learning, and in this way made further links with place-based learning theory. Occasionally, this was seen as an essentiallised and ideal conception of the value of such trips when articulated by teachers. When considered from the point of view of place based learning, the experiential and contextual qualities of the experiences of learning outside and in a residential setting occur precisely because they are linked to a wider curriculum and perhaps even assessment, as a complementary component of learning which occurs at school. Even wider experiences which occur as implicit components of instrumental learning might then be seen as aspects of free choice learning which occur as the wilder and untamed counterpart of place-based learning. The unpredictable and subjective experiences which occur when learning in the outdoors are seen then to be in part facilitated by the instrumental approach to learning which provided the initial rationale.

At Embercombe, while explicitly emancipatory in pedagogical approach, instrumental aspects of learning appeared when students reflected on their

schooling. It seemed that the wholesale withdrawal from instrumental curriculum and emersion instead into a more free and choice-based environment created a clear contrast between school and Embercombe. Many of the students who commented on this observation noted the relative 'fleeting' importance of what they called 'paper learning', compared to the lasting importance of meaningful work. Here, the role of adults also played a part in their comparisons between learning approaches. The adult at school was often (although not always) situated as a controlling agent, while adults at Embercombe were seen as facilitators to provide guidance and choice. This observation of what was seen as a more trusting approach was extended to the school staff accompanying the group – who were seen as separate to the hierarchy which had developed at school, as noted in chapter 4.

The contrasting approach to choice in learning was not only commented on by students at Embercombe. It was also noted by those at Slapton who observed freedoms available to them in their learning. Provisions of guidance rather than authority from Slapton tutors enabled a culture of self-motivation to emerge. However, not all agreed – some students at Slapton resented the work ethic and approach. This was discussed in terms of day length, work pressures and routines. It is not entirely clear whether this was as a result of a contrast to schooling with relatively shorter hours and different routines, or whether Slapton for them represented an intensification of the same routines, norms and structured which were recognised from school.

From a pedagogical perspective, school based approaches offer fewer opportunities for the emergence of emancipatory learning opportunities when compared with residential learning. Sustainability education in the emancipatory-pedagogy sense has been said to require critical and divergent thinking skills, nurtured though choice and the development of pluralistic attitudes toward difficult or wicked problems (Wals, 2011, Wals, 2007a, Sterling, 2001). Seen through this perspective, residential learning offers students who normally experience instrumental learning toward assessment opportunities to explore becoming 'agents of change' in small ways during their time at the residential centre. While instrumental learning defines the position from which Slapton operates, wider aspects of experience emerge from a critical emancipatory position, and constitute elements of free choice learning, or so-called 'soft-skills'

(Schulz, 2008). This informal aspect of experience occurring at Slapton is important in terms of addressing objective 1. The environmental encounters of students are seen to be largely objective and instrumental, however, the wider experiences and student reflections on the approaches to learning which occur at Slapton give reason to suggest that further emancipatory opportunities are available.

Place-based learning literature provide reason that learning within the community or natural environment might elicit pro-environmental behaviour change, (Wattchow and Brown, 2011, Woodhouse and Knapp, 2001). Objective 2 prompts discussion on the ways in which choice operates to challenge or construct environmental narratives, and thus to reconsider attitudes. Indeed, Slapton students noted the place-attentiveness and place-making qualities of fieldtrips in contextualising their knowledge. The role of adults and their own personal stories which engaged with learning outside of the curriculum was especially conducive in prompting different perspectives and challenging environmental narratives.

In both settings, free choice learning, emerging from an emancipatory borderland which occurred outside of formal learning at occurred as unplanned, emergent and a wild component of student experiences. While at Slapton this was clear to see in the ways that students compartmentalised their time and decision making into 'free time' and time in formal learning, inside and outside of the classroom, this was also the case at Embercombe, where unstructured time enabled an exploration of free-choice learning possibilities.

Finally, and perhaps most importantly for considering objective 2, students in both settings benefitted from seeing the 'big picture' of their learning – a fruition of their effort. This was demonstrated at Embercombe through the participation in a large building project or working in the kitchen, while at Slapton this was exemplified by the big-data focus of fieldwork, whereby others would make use of the information generated by the student. This desire and concern that there be a wider-than-self implication of the work achieved during the residential is importing when considering the role of environmental education residentials in supporting learners to become agents for change in a changing world (Jickling, 2003, Wals, 2007a, Wattchow and Brown, 2011).

## Chapter 6    Relationships

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**The charcoal kiln comes to life**
*Embercombe, 20th October 2016, Group C*

At dinner the radio crackled with a muffled voice and I listened in – "Robin, are you there? The charcoal kiln is really starting to go now, and very soon it's going to really kick off…" – I radioed back to say that I was in the linhay and I could let the group know. JC replied –"tell them to get down here for half past 7 – in 20 minutes…". I put word out to the group and began to walk down the rough track to the forge where the charcoal burner is housed. As I got closer I could smell the strong scent of wood smoke mixed with the rancid smell of tar. The flames glowed against the trees and the tin roof of the forge. I could see Jo's silhouette excitedly pacing around the kiln. Children began to gather and I heard Jo exclaim – "It's happening – it's working!" Looking underneath the kiln revealed a jet of gas firing into the flames of the now roaring fire. The jets were not yet alight. Once they light the retort function would be fully operational and it would no longer be necessary to feed wood onto the fire. More children arrived from the linhay and I overheard snatches of excited conversation – "I can't believe how hot it is – I didn't think it would be like this – I thought it would just be a small fire!" We began to tweak the vents and let more air into the furnace beneath. Bricks were removed from air vents and the flue opened. The flames began to lick higher. Then a roaring began, quietly at first, but gradually louder, until the gas pipes underneath became jets - firing white flame into the bottom of the kiln – "the retort is working!" someone shouted. Flames and sparks began to fire out of the right hand side of the kiln – lighting up the forge and the faces of onlookers. Bricks were removed from more vents – more sparks and flames fired at an extreme intensity of heat out of both sides now – "what's happening!?" Jo shouted over. More jets of flame now started to come out of the front chimney. I couldn't answer him. It had only just occurred to me that no one knew what was happening or what was going to happen – this was the first firing and we could only guess. The flames were now enveloping the kiln on three sides and a jet of fire was leaping out of the hole made in the back earlier. Someone asked me about the building – "Is it going to set on fire?" I hadn't considered that either, but I could see that the flames were now very close to the timber rafters. I hurried to block the front chimney vent with fire bricks. This helped but I was still concerned about the intense flames flaring from the vents at the side. Jo continued to excitedly dart around the kiln, grinning with delight. I hadn't seen him this excited before, and he seemed happier than I had seen him on the whole of the programme. His inventiveness and determination and vision, along with the many hours of work put in by the group over the last 10 days had brought this project into realisation. The glowing faces around me, the roar of the retort and the sparks disappearing into the night air contributed to a festive feel. I smiled as I looked around and took glee in the conversation of the children, anticipation answered and awe nurtured. The work and effort poured into the kiln through the life of the project had brought us to this extraordinary moment of fiery celebration.

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*Excerpt 6.1 The charcoal kiln comes to life.*

### 6.1 Introduction

This chapter focuses on the relational aspects of experiences of outdoor and residential learning. The chapter operates both as a stand-alone empirical entity,

but also offers threads which bring together the narratives of choice and structure emerging from the previous two chapters, as well as providing a basis for consideration of environmental challenge and discomfort in chapter 7.

Moving beyond descriptive aspects of residential outdoor environmental education focused on in the previous two chapters this chapter connects more clearly with objectives two and three. The challenge and construction of social norms and environmental narratives, as we have seen, are concerned with the structure and setting of environmental education, but they are also concerned with the social interactions and environmental encounters which occur within these settings. In addition, by discussing relationships which emerge here, this chapter places emphasis on a differential in understanding the nature of experiences, as not only concerning the individual, but more precisely, the wider-than-self scale of the learning group and the environment itself.

Relationships derive from the lived experiences of students in multiple forms, which will be discussed here; with themselves as learners, with others in their class/social group including teachers and other adults, and relationships with the wider environment including other-than-human aspects of nature encountered during residential trips. The reader will notice a spatial context to the relational areas above, and indeed, it is here that the thesis meshes with wider geographical debates concerning space, place and environmental-ethical encounters. The chapter will begin with an introduction to the relevant literature arising through the consideration of this theme before developing the theme with the assistance of student narratives and personal reflections. A short conclusion then brings the chapter to a close.

## 6.2 Conceptual Context

The concept of relationships within education bring to mind a variety of issues for consideration. Firstly, the recent developments in social constructivist thinking have resulted in considerations of relational pedagogies (Aitken et al., 2007, Bergum, 2003, Boyd et al., 2006, Brownlee, 2004, Brownlee and Berthelsen, 2006, Brownlee and Berthelsen, 2008, Papatheodorou and Moyles, 2008). Secondly, the social dimensions of learning together can be more plainly seen through understanding how social bonds grow in groups of students taking part in residentials. Increasingly, the relational considerations of outdoor and residential learning are connected to conceptualisations of experiential learning.

Finally, the relational component of this chapter must expand its gaze to include wider-than-self considerations of society and environment, invoking considerations of global citizenship, intrinsic values, deep sustainability and environmental ethics. We might consider these facets of relationships emerging from residential experiences of learning outdoors in spatial terms, beginning with the self, and moving outwards to the learning community, the wider community and eventually to the earth at large.

The literature pertaining to relationships and education prompts the consideration of relational pedagogies – the concept that each member of the learning community is bound up with one another, thus extending the notion of learning beyond the self and to the community as a whole. This constructivist position is epistemologically distinct from the traditional personal epistemologies of learning, in which children are seen to learn and acquire knowledge independently from the social group. Brownlee (2004) argues that the term 'relational epistemology' better captures the social constructivist dimensions of learning within a community, and regards the personal epistemological view as falling short of this recognition. These theoretical aspects lead on from the social learning ideas of (Dewey, 1938), Lewin (1951) and more recently, Falk and Dierking (2000) and develop an experiential learning tradition which has continued to gather momentum in recent years (Beard and Wilson, 2002, Moon, 2004, Kolb et al., 2001), which at its heart holds the understanding that learning is of and connected to the social and environmental context in which it takes place.

Place-based learning and community learning are allied approaches which lend themselves to discussions regarding relational pedagogies (Sobel, 2004, Woodhouse and Knapp, 2001, Smith, 2002). Place-based learning offers ways of seeing the educational setting as extending beyond the classroom, and even beyond the school, into the surrounding locale, which to some is about re-establishing the importance of the 'local' in a global age (Gruenewald and Smith, 2014), while for others it might simply be a mechanism for encouraging learning to engage more widely with local environments, cultures, traditions and economies (Sobel, 2004). There are intrinsic links and associations between the goals of environmental education, the approaches of outdoor learning and place based education (Woodhouse and Knapp, 2001). A number of similar approaches make use of the sentiments and teachings of place based learning,

including 'ecological education' (Smith and Williams, 1999) which connects humans and environment in learning through a holistic approach.

Beames et al. (2012) propose a spatial approach to considering the location of learning; moving from the school grounds, out toward the local area and eventually further afield, culminating in residential experiences in the further most limits of the model (see figure 2.5). This representation of learning zones connects with the theoretical conceptualisations of place based and community learning by providing a touchstone for practice. However, the model does not comment necessarily on the product of relationships in these zones.

Complementary to the recognition of the wider space in which education takes place, 'social learning' has also gathered momentum in recent years with relation to sustainability education (Wals, 2007b, Wals, 2010c). The term 'social learning' holds multiple meanings, but is widely accepted to concern learning which takes place "when divergent interests, norms, values, and constructions of reality meet in an environment which is conducive to learning… [and]… can take place at multiple levels i.e. at the level of the individual, … group or organisation or at the level of networks…" (Wals, 2007b p.18). From the point of view of social learning, sustainability and environmental education emerge as an outcome of a process, and not as a product – thus speaking to the emancipatory / instrumental distinction between typologies of learning approach (Wals et al., 2008).

Relational approaches to viewing the experiences of outdoor and environmental education also lend themselves to an examination of environmental ethics, not least relational ethics already discussed in chapter 2, but also socio-environmental experiences of the other-than-human world. New Animism (Harvey, 2005, Harvey, 2014) has been gaining recognition in recent years and lends itself to discussion on the relationships between learners in residential settings and the other-than-human environment with which they are immersed. Animism is used here in its relational and embodied, rather than solely metaphysical sense, to "reimagine and redirect human participation in the larger-than-human, multi-species community" (Harvey, 2014 p.2). Alongside allied relational standpoints of environmental discourse such as Leopold's Wider Biotic Community (Leopold, 1949), ethics of care (Held, 2005, Tronto, 1993) and a plethora of ecotherapy approaches to outdoor group work which lend themselves to educational practice (Buzzell and Chalquist, 2010, Clinebell, 2013, McGeeney,

2016), animism provides a useful lens through which to view the wider spatial scale of relationships with(in) outdoor and residential learning, as well as providing the means though which the variety of relational positions – from self to environment - might be seen to be mutually productive of one another (Bonnett, 2013).

This chapter now turns to the discussion of the empirical fieldwork concerning relationships at multiple scales. The discussion makes efforts to connect itself with the literature discussed both here and in chapter two, and in doing so begins to craft a more specific insight into the topic itself, raising further issues and suggestions which will be picked up in chapter 7.

## 6.3 Empirical discussion

The discussion builds around three scales of concern – increasing spatially each time. The areas of consideration are: relationships with learning and the self; relationships with place and each other; and relationships with the other-than-human world. Making use of previously discussed literature this section discussed these spatial areas in accordance with the empirical findings from associated fieldwork at both case locations.

### 6.3.1 Relationships with learning and with the self

Across both cases, the student's own sense of self and their relationship with learning was explored, both implicitly and explicitly. From a relational standpoint, the focus on the self draws understanding and analysis from the wider experiences of the students in the setting; yet it focuses and centres the student in this relational world, nested in community, the setting and the wider environment. Relationships with the self, in many senses were not the most accessible or easy to draw out, and only surfaced when witnessed in association with different scales of relationship. Relationships with the self entailed the discovery of something new about oneself or the disruption of existing ideas. Often these discoveries and disruptions were associated with work, which the students were taking part in as part of the organised nature of the programme. Relationships with learning, therefore, were important aspects of residential outdoor learning courses witnessed by the researcher.

*Photo 6.1 The lime kiln reaches temperature (Embercombe, Group D).*

During the residential programmes, students were presented with choices concerning their work (see chapter 5). At Slapton these choices often involved independent investigations necessary for assessment purposes. Regardless of the instrumental motives for such work, students commented on the new understandings this way of work had brought about:

> *"You could have just given us sets of shingle in a lab and told us to measure it out, but having had to do the walking to collect the data, we understood the importance of why we were doing it, and what we were doing and what we're actually proving… Like we were showing longshore drift is a real process here, it is something that really happens."*

> (Cai, Slapton, Group G)

Thus, the experiential nature of the learning at Slapton helped increase understanding and contextualise knowledge. From a relational standpoint, students were given the opportunity to try out new ways of working, as expressed at Embercombe:

*"I often made the choice to go to something I wouldn't really want to do ideally, and doing those things, it wasn't a great beginning but as the day went on I learnt to appreciate the work which is something that's a good life lesson. Sometimes things don't look very rosy but they can become good situations I guess. Yeah that's something that kind of went in for me".*

(Laura, Embercombe, Group C)

Whilst situating their understanding of the topic within the environment enabled students at Slapton to better understand the importance of work – at Embercombe, the work itself was almost incidental to the personal understandings which this leveraged in them. Many of these understandings were located in themes such as trust, responsibility and choice. One student spoke about her feelings after helping to run an autumn open day at Embercombe:

*"I found that quite empowering. It was also kind of confronting to me. It made me think, I'm kind of nearing the adult stage of life and this is the future of my life, but it was also an honour, and it was also… Yeah, to be given that much responsibility, and being given the trust of this incredibly important day in our hands really, was really an honour".*

(Calum, Embercombe, Group C)

In this way, the work at Embercombe often acted as a vehicle for learning and not as the learning outcome in itself. However, the goal of working towards something was clearly important for some of the students who made connections between needing to achieve and the wider motivations of the workplace in society:

*"Once people didn't actually have something to work towards, people started complaining… Like, I found it quite strange actually, if you didn't have something to work towards, you would like 'I'm done here… I don't need to be here anymore'… After the open day, people were like 'I want to go home now'. Now the open day is done, that was our goal, now it's done. I understand it's a long time. It just seems now that in our society, you always have to be working towards a certain goal, and once you fulfil that goal you can be like 'okay I will move on now'…"*

This way of relating to work drew parallels with students learning at Slapton, who saw the purpose of the work in the goal rather than necessarily in the process. Students commented on the role of fieldwork for exam success, and as discussed in chapters 4 and 5, visits to Slapton were often seen to be an extension of school. Despite this, students found ways to describe their learning at Slapton in a different light to that as school, specifically in terms of the time that was permitted for them to reflect upon their learning:

> *"At school you have a lesson you get the work done in the classroom but because there are so many lessons going on in seven different subjects you don't have time to everyday go home and look at the work that you just written off the board and fully take it in. Whereas here, we got three days and one investigation. We got loads of time to think about it, we can go back to our room and think about it, we can write stuff down… Whereas at school we don't have that you forget it a lot more easily".*

(Mark, Slapton, Group F)

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**Metaphoric and chemical transformations become apparent**
*Embercombe, 27th April 2016, Group B*

I awoke well rested to a frosty morning. I was first to the dining room where I was shortly joined by two tired looking students who spoke to me about my work and asked questions about how long I was planning on staying at Embercombe for. After breakfast I went and joined the education team by the polytunnel fire circle to begin a check in. There seemed to be a sense that a shift had begun in the group of young people. It was commented on that they seemed to have 'arrived' and that they seemed different this morning- more at home. It emerged that there had been a number of fractures within the group and some dramas between friends and friendship groups. JC commented that while the focus of the week was on the lime kiln, the social aspect was just as significant "we're looking at chemical transformations – not only with the lime, but in how the group works together – there are reactive elements within the group and personal and social transformations are taking place".

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*Excerpt 6.2 Metaphoric and chemical transformations become apparent.*

### 6.3.2   Relationships with place and each other

Increasing the scale of focus one step, the learning individual is seen to be nested within community – both as a learning community, and as a broader human community consisting of residential centre staff, volunteers, educators, other

students on residential courses and local people. The relationships developed alongside others are located in place and emerge from the interactions had with the environment of learning – often the residential setting, and sometimes further afield. Any consideration of relationships with a broader learning community must therefore take into account the places of learning themselves and the interactions which they entail through the particularities of space.



*Photo 6.2 "I spoke to more people on this trip than I have at school. Because I never see them. I never go out with them, I never speak to them. This trips brought everybody a bit closer together" (Slapton, Group J, participant photo).*

Relationships with each other within the learning group became important functions of the residential experience. Being in each other's company for such a prolonged period of time was, for most, unusual. Students commented on how the residential programmes helped them to get to know one another better:

*"This trip has been a big bonding thing. Without sounding cheesy. There's a lot of people, most of them are in my geography class, but the people who aren't my geography class I don't really speak to anyway so when we are all together it's been a lot better".*

<div align="right">(Penny, Slapton, Group H)</div>

Another student in the group, Claire, continued:

*"Two of the people in our group, I had never really talked to before because they were new this year. There was so much to do and we had to work together to do it in the time that we were given, it just made a lot more friendship stronger… I know them really well now,, and I know that they are really nice people".*

<div align="right">(Claire, Slapton, Group H)</div>

In particular at Embercombe the work itself was seen as a vector for building social bonds between the students:

*"I do like how you can work hard and enjoy yourself but also be asked chat and, you're working really hard on breaking a sweat, but you're also relaxing at the same time and you can chat your friends but you also get the job done".*

<div align="right">(Elsie, Embercombe, Group B)</div>

Similar to Elsie's sentiments of working together, Zak notes how carrying out fieldwork together can be socially fortifying:

*"It's just like the togetherness of the geography class.… The unity, the working together because I think I think that's what field work is all about, is not about single people going out to the field to count flowers and stuff it's about a group of people doing that experiment."*

<div align="right">(Zak, Slapton, Group E)</div>

Zak's comments were continued by Mohammad who linked the need to work together in the field to the exam:

*"We are working as a team, and at the end of the year, and at the end of next year even we going to be sitting the same exam… So the data we*

*collect together… We actually rely on each other for all the data we collect on this trip so as a result I feel teamwork is an integral part of this trip."*

(Mohammed, Slapton, Group E)

It seems that despite the difference in working approaches at Slapton and Embercombe, and the pedagogies involved, both placed focus on working together, and in both locations this led to students getting to know one another better, and speaking / working with people they wouldn't otherwise have socialised with. This was also the case with relationships between adults and students, with students noticing how they had got to know their teachers better as a result of the trip:

*"I have never spoken to Miss Crewe. I haven't spoken to Miss Caswell since I had her in year nine or year ten. I got on with them both really well. I never would have if it was just at school."*

(Charlie, Slapton, Group J)

*"I think that the adults here are more… reachable, because they're funny and they really get into the activities more than the teachers do in school."*

(Jessica, Embercombe, Group D)

*Photo 6.3 Teaching fire lighting in the woods at Embercombe (Group X, author's photo).*

The importance of the lived experience of being at the residential centre as a community for bringing about these additional bonding opportunities seems to be important. Most of the socialising happened outside of formal lesson time in the evenings or at meal times at Slapton. It also occurred in the field, during field work tasks where visiting teachers would often help students. At Embercombe, the work tasks were especially important for providing opportunities for socialising. Discussion was encouraged and provoked by Embercombe education team and adults worked alongside the students to get the work done – an approach which occasionally prompted students to react with suspicion:

> *"I think at the beginning, working with the adults I found it a little bit intimidating because they are a lot older than you, and they know a lot more… probably... But afterwards, you don't necessarily get to know them, but you feel more part of their community as well, and it is a lot easier working alongside them… Everybody is working together as one".*

> (Ryan, Embercombe, Group D)

The intimidation mentioned by Ryan suggests a difference in working approaches between school-based work and the approach taken at Embercombe. The notion that adults know more and are seen in positions of authority commonly at school resonate with what has already been said in chapters 4 and 5. Adults were enabled to work alongside the students while taking part in the residentials which for them was a distinction between their way of working when away from and at school. As noted by Jessica, the adults were then 'more reachable' because of a removal of structural distance necessitated by a way of working with young people in a school setting. For some students, such as Charlie – this meant getting to know their teachers better.

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**Role models (a discussion with a teacher over dinner)**
*Embercombe, 8th February 2016, Group Z*

At dinner the energy had returned and a full dinner hall and an excellent curry made for a jubilant feel to proceedings. I spoke to the class teacher about the students and she told me that she had seen a real change in some of the students – speaking about one boy – "That's the first time I'd hear him say that, admit that he can be a pain – he would never have come out and said that before", and speaking about the group in general –"it gives the quieter ones a chance to come out and express themselves more while the more boisterous ones are a becoming more subdued". She also spoke to me about the role of male role models at Embercombe – "I think the type of male role models here makes a difference. At school they just don't get this – I think it's really good for them" [speaking about the gender imbalance at her school in the teaching staff].

</div>

*Excerpt 6.3 Role models (a discussion with a teacher over dinner).*

Adults working at the case locations were also the subject of comment from some of the students. As already discussed (Chapter 4), adults at Slapton were perceived as teachers, while Embercombe encouraged a view of adults as facilitators, or guides. In both locations, the adults working at the centres were discussed by students.

*Photo 6.4 Jo paints the lime cycle in lime wash onto a table on the last day of an experiential science programme (Embercombe, Group D, author photo).*

For some, such as Kendal the relationship with adults at Embercombe was strengthened by the knowledge that they wanted to work with young people:

> *"I keep thinking they want to be here, they want to work with young people like us and help us work, I think that's what made me get used to working alongside them".*

> (Kendal, Embercombe, Group D)

Kendal's comment is given more strength because Embercombe relies heavily on volunteers for running education programmes. Again, as was noted in relation to their teachers, the students noticed how they related differently to Embercombe staff as compared to teachers at school:

> *" I feel quite equal to them. Whereas in school they are teachers, and they give us homework… I just feel equal to them here, more equal, I work a lot better with them than…".*

> (Oliver, Embercombe, Group D)

While much of the working day at both locations gave students new opportunities for developing relationships with each other as well as with adults in the group, for some the days were socially intense and could become overbearing with constant social contact throughout the programmes:

*"It's difficult coinciding with 33 other people, and more than that because there are adults there to, volunteers and everything…It's really hard for the first few days. It really made me want to go home and be in my own space and be left to my own thoughts, and quietness… It makes you appreciate that more. The exercise of being with people".*

(Judy, Embercombe, Group C)

Judy's comment was a common concern at Embercombe, due to the intensity of the working days and the challenges presented to programme participants in terms of sharing social space and working together. Similar comments included concerns for not having enough time alone, away from the group. Although specifically this was not expressed at Slapton, other social issues came to the fore, including not getting on with individuals in the group:

*"the other people we share a room with don't like us. But, because we didn't have any other friends we had to share with them But they were telling everyone that they hated sharing a room with us…"*

(Kim, Slapton, Group F)

Here, the previously existing dynamics of the groups were placed into focus where interpersonal relationships began to cause difficulty. Sharing spaces often caused conflict and difficulty, but could also be an opportunity for reconciliation – sometimes of deep rooted and long standing issues which had not been previously addressed in school. Such was the situation on one programme at Embercombe, where issues of bullying in the class came to the fore. In this case, the teasing which had been an issue for many years was addressed head on by a member of Embercombe staff one morning after a string of issues emerged the previous days. This is returned to in chapter 7.

*Excerpt 6.4 Settling in and speaking out.*

As well as the sharing of personal space at Embercombe, an emphasis on a practice of speaking out in the morning circle in front of the rest of the group caused difficulty for some, who struggled with expressing themselves in such a public setting:

> *"I think generally I am really quite an open person, but I sometimes struggle with expressing exactly how I feel, like, I can't really put it into words. I feel like the circle time has been… I don't know, it's been nice to see everybody open up more but it's just that sometimes I don't feel like talking about how I feel, and other times I really do. So it's, I don't know, it can be quite challenging"*
>
> (Iona, Embercombe, Group C)

> *"I know that in the beginning when we started, I got really nervous, I'd cry or go really bright red… So I know that in the beginning I was tearing up whenever I talked, but I think we [became] a bit more used to it".*
>
> (Laura, Embercombe, Group C)

Iona and Laura demonstrate the anxiety and awkwardness that comes with speaking in front of others which was common to many of the students who came

to Embercombe. The use of a circle to 'check in' each morning became a well-rehearsed concept for the groups, and over the days of the programme, students grew in confidence to be able to talk in front of one another. This enabled the group to respond to one another's moods and feelings as the day went on:

*"It is quite nice to know the beginning of the day, and at the end of the day, this is how this person is feeling and to be able to be a bit more sensitive to that… But it is good to have more knowledge because then you can piss someone off and you don't really know why, [but] then you can think back and you can be like, oh that person is feeling really homesick, or something like that, you know?"*

(Alex, Embercombe, Group D)

Alex's comments tell us something about the importance of the check-in for shaping the interactions between students, and enabling an emotional and social intelligence to take hold within the group. Although social interactions formed a significant part of the experience of students at Slapton, the explicit reference to interpersonal wellbeing was not present on field courses taken part in. Students commented on barriers to social cohesion at Slapton, such as separate tables at dinner, and short course length:

*"At meal times you are just sitting this table at the school this table with this school, so you don't really mix… The only place you can mix is in the communal areas".*

(Brenda, Slapton, Group J)

*"If it was a longer time we would have definitely mixed. It takes a few days to get used to each other".*

(Connor, Slapton, Group J)

While the points raised in the previous two sections have highlighted the ways in which learning as part of residential and outdoor learning programmes offer opportunities for relationships with the self, personal approaches to work and with each other as part of a learning community, as well as the barriers and obstacles to interaction and developing relationships, little has been said of the setting and environment in establishing a relational understanding through outdoor learning. The next section turns to this and attempts to thread together a number of allied

strands of student experience in association with the other than human world.

### 6.3.3   Relationships beyond the self

Beyond the self, we enter into the other-than-human world in order to take into account interactions with the wider environment beyond the direct and sole experience of human participants. As already mentioned in previous empirical chapters, the non-human world plays an important part in helping participants to understand and make sense of their experiences, whilst also providing challenge and the potential to disrupt social and cultural norms pertaining to human-environment relations. This section of the chapter turns back to the non-human world in order to begin to understand the role of the wider environment in shaping a relational ontological position, and thus will attempt to connect it to the personal experiences of students at residential centres. As such, this section connects with objective(s) 3.

A large aspect of this section concerns the development of 'wider-than-self-thinking' with respect to the wider environment. As we have already seen, concern beyond the self has manifested with regards to team work, working together and social bonds between the groups. However, this section places specific focus upon the 'wider-than-selfness' which brings participants into communion with the environment – specifically the other than-human world. While not always explicit, the relationships with the other-than-human were developed as an integral aspect of the programmes at both settings, seen to be a development of 'nature attentiveness' as Nicol (2014) puts it.

*Photo 6.5 Discussing coastal erosion in Start Bay (Slapton, Group E, author's photo).*

One student spoke about her reaction to witnessing a storm on the coast:

> "It was interesting seeing such dynamic environment as well, because where we live nothing changes within the landscape, there's just sheep always. There's no reason why any features within our local landscape would ever change… It's interesting seeing how natural force can make a genuine difference within a space as short as a year".

(Ashley, Slapton, Group G)

Ashley's reactions imply a discovering of the visceral implications of being a part of a bigger system, of change and dynamism – something which she recognised she doesn't often see in her home environment. Perhaps this has something to do with being in new places, or maybe it is something to do with the rapidly changing nature of the coast. Another student in the same group responded to Ashley's comment

*"It makes you care more about it I think, seeing it first-hand. And the fact that it is constant as well… a force that just won't stop, a force that is always going to be there"*

(Tomas, Slapton, Group G)

Tomas adds to Ashley's spatial analysis a temporal consideration – that the forces of the sea are not only bigger than us (and the properties the students had witnessed being damaged by the waves), but that they are older and longer lived than us.

Students were also concerned for the residents living in the houses, and worried about their future:

*"Seeing actual broken houses… That was like… It really hit home. You're like, this is real. This is why we defend our coast. There are actual lost properties here. I took so many pictures, because you can still see all the stuff inside the house. It was like… That's crazy. Someone slept there".*

(Lucius, Slapton, Group G)

Lucius' comments speak to a concept of care beyond the self, for the residents of the houses and their wellbeing and safely. Yet, beyond this, these comments also intersect with those of Tomas and Ashley in that they recognise the 'reality' and precariousness of the situation precipitated by the turbulent sea. While there is a recognition of care for the residents affected there is also a deepening of understanding of the forces of the natural world.

Caring beyond the self doesn't always require a vast intervention in the way of a coastal storm however. In the field, the work itself provided an opportunity to explore wider-than-self thinking. At Embercombe, the work carried out in the day was infused with beyond the self-significance:

*"It was like we were learning whilst working, and the work did actually make difference. So we were learning how to cook, and when we did we did it for everyone. And so, it felt like we were learning, but also helping everybody. It made quite a big difference on how I perceived the work. It made it more enjoyable".*

(Freya, Embercombe, Group B)

Work at Embercombe necessarily carried with it the implications of acting through intrinsic motivation. Frequently the concept of 'future generations' was invoked and thus a deep sense of sustainability became paramount to finding the will to carry out tasks which would carry no direct gain through their use – such as sowing seed, or sawing up wood to be seasoned for next year's programmes. Instead, participants we encouraged to see that food harvested from the gardens was planted by a group 5 months ago, or that the wood burnt at night to keep them warm was sawn by the class two year's above them. The intergenerational aspects were brought to the fore at Embercombe.

## 6.4 Conclusions

This chapter has focused on the relationships which occurred at the residential settings on a variety of scales; the self, the community and care for wider-than-self. As such it contributes most directly with objective(s) 3. This chapter necessarily connects with and continues many of the themes developed in the previous empirical chapters, while laying the groundwork for the proceeding chapter which will explore a relational understanding of challenge and discomfort. In this section, the main points of discussion are re-established and connected to one another as well as the main bodies of literature which underpin the discourse; namely environmental ethics and relational pedagogy. Important contributions this chapter makes to objective 3 are highlighted throughout the discussion.

Relationships provided a continuous criterion for students describing their experiences of residential environmental education. From various perspectives, a social component of learning was clear. Residentials have been demonstrated to provide an important social component through the experiences offered to students, and have been applauded in the 'Learning Away' report for doing so (Kendall and Rodger, 2015). While the findings of this chapter find reason to agree with this report, there is also question as to what extent learning in residential settings implies a deeper relational pedagogical approach in which students take part in broader connotations of interdependent social learning (Bergum, 2003, Brownlee and Berthelsen, 2008). In asking this question it is possible to look beyond the personal-social and toward a constructivist position advocated by Selby (2015), who calls for sustainability education to move beyond

a 'stunted and inadequate epistemology' to become responsive to broader experiences, and promote 'learner sensitivity' to the world.

Within both case locations, residential programmes entailed new ways of working and challenging oneself, akin to a broader set of experiences – and therefore often involved the discovering of something new. Frequently, students commented on how they felt freer to explore topics and approaches to learning which they didn't often feel at school. Students felt more able to attend to their best way of working and relating to the topic or task in question. This was not universal, and as has been discussed previously, there were some students who felt that the working days were too long and represented a continuation of schooling. At both locations, goal based learning prevailed – with students motivated by the promise of finishing a task, or working toward an event or deadline – in line with the concepts of schooling.

At Embercombe, the development of a relationship with the self was made explicit and as such the work to be done was seen by staff as a vehicle for enabling students to come into a deeper understanding of their own ideas and ways of being. While Slapton placed less emphasis on this, the more open and free choice approach to learning provided similar opportunities. This point brings into focus those aspects of the residential which enable personal development – an often cited reason for providing residential learning for young people (Embercombe, 2016b, FSC, 2015b, Kendall and Rodger, 2015). Interestingly, despite the less explicit focus on personal development at Slapton, students clearly expressed social development outcomes as a result of residential experiences, whether as "the togetherness of the geography class" comment on by Zak, the teamwork highlighted by Mohammed, or making new friends suggested by Claire. Social learning processes occur at Slapton, in between the formal outcomes of the learning experiences, providing a balance with the academic focus of the trips (Boyd et al., 2006).

However, when contrasted with Embercombe, which holds personal development as a central rather than periphery component of the stated student experience, students expressed themselves in different terms. The social-group elements were still present, yet the students further expressed the emotional

aspects of relational learning. Sharing and reflection provided a forum during which emotional engagement within the learning group was heightened, enabling students like Iona to "open up more", despite the challenge of speaking in front of one another. Examining this a little further, the relational pedagogy deployed by Embercombe can be seen to have been affective in eliciting a deeper sense of sharing within the group, and therefore placing a greater focus upon the group interaction. There is no doubt that these deep relational moments proved to be intense for some students, in ways in which Foran (2005) has recognised. Socially, the residentials in both locations were undoubtedly intense for students, who were used to shorter working days and a separation between school and home life. Many of the students found it hard to find solace and peace in what seemed to be a social overload at times.

In recognizing this, the relational approach examined by this thesis in objective 3 is brought into focus. This type of intensity was not recognised by Learning Away (2015), yet gives rise to a notion that residential environmental education experiences are more than simple containers for social interactions – they provide opportunities to deepen relational experiences and to promote learner sensitivity (Selby et al., 2015).

In both locations, it has been seen that time for further discussion and reflection were important for coming to new understandings pertaining to a range of issues at a variety of scales, from the self, to ways of learning to relationships with others. Embercombe provided focused time for such reflection to take place, whereas at Slapton, much of this time was taken by students in their 'free time' or during discussion groups with the researcher. It might be the case that further reflection and discussion would have enhanced student's relationships with learning and themselves at Slapton, as was observed at Embercombe. Reflection is seen through experiential and social learning practice to be an essential aspect of educational experiences, as perceived as a cycle in which reflection provides a basis for further learning (Boud et al., 1985, Moon, 1999). Reflection also forms an important aspect of transformative learning whereby learner worldviews are examined and revised (Mezirow, 1990a). Interestingly, in both locations, although reflection was made use of pedagogically in different ways, the focus group itself became a forum for student reflection, which enabled further discussion and

conveyance of meaning.

Both case settings exist as communities of practice, with associated social and place-based learning potentials attached, meaning that the learning experience becomes wider and more diffuse as a result of the setting. The relationships which develop as a result of a diffuse community setting are varied. Residential programmes at both settings offered spaces for relationships to form and strengthen between individuals and for new friendships to form. The focus on the residential experience being a 'community experience' was different across the two locations, with Embercombe placing an explicit focus on learning as part of a community while at Slapton this was far more distant in implication, to the extent that it often seemed to be overlooked as a vector for learning and social development, as seen in line with community and place-based learning approaches (Sobel, 2004).

In both locations, the development of teamwork acted as a conduit for friendships to form and social bonds to strengthen. Working together on collaborative projects at both Slapton and Embercombe often involved long periods of cooperation in order to work toward an end goal. Students commented that this provided them with the means to get to know one another better, and to overcome distances in the class. In particular, it was noted that distances between adults and students perpetuated by power relations in school were overcome, with students reporting that they felt that they had got to know each other better on the trip, and that adults seemed more 'reachable' on residential programmes – noted previously (Kendall and Rodger, 2015). While this is no doubt testament to the dynamics within the group, it appeared the work itself had acted as a vector for these new relational encounters to occur between individuals. This aspect is particularly important in addressing objective 3, as new relational thresholds between student and teacher open opportunities for challenge and restructuring of social narratives and norms. These points are returned to in chapter 7 in more detail.

As the discussion moves to the furthermost 'zones of learning' (Beames et al., 2012), it is clear that wider-than-self opportunities for care and concern are at play throughout the experiences of students. Looking beyond-the-self occurs in

many ways at multiple scales – yet, in conjunction with the natural non-human world, these opportunities become increasingly powerful, as the next chapter will explore. Learning in situ, with the well-documented benefits of place-based and community learning, provides students with the contextual backbone to establish meaningful links to the topics and foci of learning, while learning as part of a wider community of peers, and alongside adults provides the motive to work together to achieve goals (Gruenewald and Smith, 2014, Wattchow and Brown, 2011, Woodhouse and Knapp, 2001). So too, principles of ecological education offer opportunities to understand relational interactions and pedagogies from a wider-than-self perspective, invoking not only sensitivity to other ecologies and wider epistemologies remarked on by Selby (2015), but also empowerment and conceptualisations of justice (Smith and Williams, 1999).

This chapter has covered a large amount of empirical and conceptual ground concerning the notions and implications of relationships in outdoor and environmental education. Emerging from, and building upon chapters 5 and 6, this chapter has set the scene for considering new ontological positions for environmental education and provides important contributions to objective 3. Moving into the final set of empirical materials, chapter 7 continues to a large extent with the theme of relationships, while extending the understanding of what might be termed 'relational' within outdoor and residential settings. Deepening relationships with the self, with regard to new environmental understandings, often entails the performance of the other-than-human natural world. Indeed, the role of the other-than-human environment permeates through every aspect of such an educational approach by virtue of 'being in place' of the other (Nicol, 2014). These encounters with the unfamiliar, unexpected and unpredictable are what make up much residential outdoor learning experiences and provide openings to new understandings while challenging ways of seeing the world. Making use of conceptual areas of behaviour change and environmental ethics, the role of discomfort in relational ontological encounters within environmental education and sustainability education is discussed in the following chapter.

# Chapter 7    Discomforting worldviews

> **Issues of bullying in the group; rats disturb my sleep**
> *Embercombe, 26th April 2016, Group B*
>
> I slept very badly last night due to mice or possibly rats in the insulation layer of the yurt I am staying in. All through the night I woke on regular occasions with rustling next to my head and a sound of small scurrying feet. Thankfully the rodents were not actually *inside* the yurt, but it was enough to ensure that my sleep was disturbed a great deal.
>
> I attended our morning meeting with the education team where a number of child welfare issues were discussed. The team had picked up on some bullying – under the guise of 'banter' which seemed to focus on a particular individual. There were also issues of a couple of students seeming distant and outside of the processes of the last couple of days which had been picked up by the teacher and mentioned to a number of us. It was agreed to observe the group for another day before attempting any kind of intervention but there was a definite feeling that this time at Embercombe might be an opportunity to break cycles of bullying and social exclusion.
>
> We met the group on the mound after breakfast where Robin had got a fire going. Isabel introduced the circle and asked everyone to be silent and to consider how they feel about the work they are doing. The silence lasted a very long time (6-7 minutes) as no one seemed willing to speak. Some of the students became giggly and a few of them were clearly cold. The sunshine which had begun the day then turned to a sudden burst of sleet, at which point we decided to retreat to the shelter of centre fire [a large building]. Here, we reconvened the circle and JC spoke first, followed by the students to his left. As we went round the circle it became apparent that some of the children were very tired and stated that they thought a lot was being asked of them – "it seems like we're being asked to do jobs that adults do" one said.

*Excerpt 7.1 Issues of bullying in the group; rats disturb my sleep.*

## 7.1 Introduction

This empirical chapter brings together a number of findings from work with groups in the field concerning notions and connotations of discomfort. It explores how discomfort has operated and how uncomfortable situations arose during a variety of residential learning experiences across the two case locations. This chapter connects unequivocally with objective 3, and pushes the thesis as a whole into a discussion on the relational ontological manifestations of outdoor environmental education. While chapter 6 made use of examples of relationships emerging from fieldwork and outdoor learning in a multitude of ways, from those which entail getting to know oneself through learning, to social relationships, and finally, those relationships with the surrounding environment, this chapter moves to question more deeply the significance of those relationships, and the

challenging or uncomfortable moments which make up relational experiences in the outdoors.

Discomfort has been theorised to operate in powerful ways when made use of as an explicit form of pedagogical approach. In this role, discomfort acts to destabilise and disquiet deeply held social and cultural norms through exposure to otherwise hidden narratives and worldviews. As will be explored, cherished beliefs and values are challenged and confronted through uncomfortable learning which involves a form of reflexive practice. The role of the self and the way in which injustices are portrayed by this approach as being personally held and manifested enables a questioning not only of wider societal narratives, but also of personal beliefs and values. Indeed, if this were to be taken further, it might be said that our own worldviews are often reflected by the perspectives of society and vice versa. A social change pertaining to sustainability therefore begins with ourselves. In this way, the theoretical context in which this chapter resides is relational and involves a variety of spatial settings.

This chapter brings attention to the ways in which various incarnations of discomfort, challenge and confrontation in the field might lead to a breaking down of boundaries between human and other-than-human entities, not least in the ways in which learners perceive of themselves in relationship with the other-than-human world. As will be explored, these considerations of communion and relationship arise both as premeditated aspects of programme design and as implicit components of residential learning experiences. Through an initial discussion of specific literature relevant to discomfort and challenge, the chapter moves on to consider the empirical subject of student experiences of discomfort in the field. Importantly, this chapter moves the discussion toward the central thrust of this thesis. Making use of a previously grounded understanding of how relationships operate in residential settings, the material presented here pursues a relational standpoint from which to consider experiences, attitudes and behaviours. Clearly linking with objectives 2 and 3, this chapter contributes toward a well-situated, yet ontologically incomplete, understanding of relationships, the role of the non-human environment, and challenge in outdoor and environmental education and the narratives constructed through environmental encounters.

As with previous chapters, these moments from the field are drawn from the empirical material collected through participant observation, focus groups and the author's own reflections. Analytically, they form an overarching theme which sits alongside the previous three chapters as level five codes. The empirical content of this chapter, shares some of its sub-coding with the other three empirical categories. It is necessary to reiterate that although discomfort is dealt with specifically here, it merges and intersects with the previous empirical material.

## 7.2 Conceptual context

The concept of a pedagogy of discomfort was forwarded by Megan Boler who suggested that discomfort might operate within educational settings to enable students and educators to "willingly inhabit a more ambiguous and flexible sense of self [and to engage with a] critical enquiry regarding values and cherished beliefs" (Boler, 1999 p.176). We embody a set of culturally and socially manifested beliefs and values which provoke certain behaviours. Unsustainable behaviours, although enacted by individuals are embodied by society and provide a normative set of social conducts and behaviours which become accepted by a social group (Cialdini et al., 1991). Sociologists agree that social norms are key to shifting behaviour, but developing new norms has posed a challenge to educators working with issues of environment and sustainability (Kollmuss and Agyeman, 2002).

Transformative learning involves at its heart the challenging of these norms, and provokes a confrontation and eventual shift to what Mezirow (1997a) terms 'habits of mind'. Emphasising the significance in challenging our perspectives, Mezirow (1997a) comments; "We do not make transformative changes in the way we learn as long as what we learn fits comfortably in our existing frames of reference" (pp. 7). The mechanism for creating shifts in habits of mind toward more sustainable behaviours as well as pluralistic conceptions of justice, might be found then in an education which acts to discomfort of our values and cherished beliefs (Cranton and Taylor, 2012a). The process of working with discomfort in an educational setting entails by its very nature an upset and disruption to the values and beliefs of students. It draws out assumptions and places them under scrutiny. It extols the uncovering of prejudice and avoids simply learning about injustice, and rather attempts to break the mould within

which injustice is established. Boler has termed this the act of 'shattering of worldviews' (Boler, 1999).

A pedagogy of discomfort has been applied to a variety of issues from gender, class, race, poverty and political conflict in a number of fields including teacher education (Cutri and Whiting, 2015), social work training (Coulter et al., 2013, Redmond, 2010, Nadan and Stark, 2016) and medical education (Aultman, 2005, Wear and Kuczewski, 2008). Meanwhile, sustainability educators have been growing increasingly aware of the importance of engaging with the underlying worldviews of students, although several potential barriers to implementing such a pedagogy arise.

It is easily argued that placing a learning group into a confrontational situation which entails risk goes against the 'safe spaces' policy of good educational practice, which protects individuals from uncomfortable or risky scenarios. While this guidance might be sound in terms of safeguarding individuals from harm, the use of safe space has been critiqued (Arao and Clemens, 2013, Cook-Sather, 2016, Rom, 1998). Noticing the increasing prevalence of 'safe space' as a metaphor for removing conflict from the classroom (and therefore arguably diminishing prospects of criticality and pluralism), Rom (1998) began a conversation about the appropriateness of such an approach in education. Later, working with issues of social justice in the classroom, Arao and Clemens (2013) came to the conclusion that risk cannot be removed from discourse on such matters, and to suggest so would be counterproductive and disingenuous. Instead they emphasise that open discussion on these pressing issues comes from an acknowledgement that dialogue about them entails a degree of discomfort and risk, and therefore suggest the use of the word *bravery* rather than *safety*. In doing so, Arao and Clemens (2013) propose that students are more prepared to be challenged and confronted in the learning environment. Building upon Arao and Clemens (2013) and highlighting the important role of institutions in supporting learners and educators to step in to such spaces, Cook-Sather (2016) suggest that making use of brave space "implies that there is indeed likely be danger or harm—threats that require bravery on the part of those who enter. But those who enter the space have the courage to face that danger and to take risks because they know they will be taken care of—that painful or difficult experiences will be acknowledged and supported, not avoided or eliminated"

(p.2). This assertion raises with it the importance of institutional support for educators making use of brave spaces, as well and the need for trusting and caring relationships between students and faculty. Furthermore, a pedagogy of discomfort operating in brave spaces raises further questions concerning the significance of those spaces and places of learning, as well as the others with whom we share them. A relational approach to transformative learning for sustainability therefore requires us to look beyond the institutions of which we are commonly a part, and toward the non-human dimensions of the wider environment.

Many educators and therapists are now working on the thresholds of discomfort, and are explicitly attempting to use their work to bring humans into communion with the non-human world (Harper et al., 2011, Rust, 2004, Davis and Atkins, 2004, McGeeney, 2016). Elsewhere, nature connection and ecopsychology approaches are used to engender pro-environmental behaviour and to promote health and wellbeing (Wilson et al., 2009, Burls, 2007), although, wellness in association with time spent outdoors has also been said to encourage a more innate connection to the natural world (Brymer et al., 2010).

Bonnett (2002) suggests that environmental and sustainability educators should begin to build a relational component into their work and seek to "reconnect [people] with their [ecological] origins and what sustains them and to develop their love of themselves" (p.15). In practice, outdoor environmental educators are situated in an experiential domain which is appropriate for exploring human relationships with the environment, because their experiences are already based in nature. Considering this, Nicol (2014) comments that the 'lived experience' of outdoor environmental education might emerge rooted in an ecological ontology. Bonnett (2002) points out that this must occur as an ethos located in practices which exist outside of, as well as alongside, the instrumental curriculum.

While some of what this chapter offers speaks to issues of behaviour change and traditional conceptions of experiential learning (Russell, 1999, Beard and Wilson, 2002, Mittelstaedt et al., 1999), it also speaks to metaphysical conceptions of nature and philosophical orientations toward animism and materialism (Harvey, 2005, Abrams, 1996), which have received increasing interest in the field of outdoor and environmental education (e.g. Clarke and Mcphie, 2014). This chapter combines the new animism and new materialist philosophical groundings

insights from ecotherapy practitioners who have made use of such ontological orientations (Buzzell and Chalquist, 2010, Clinebell, 2013). The empirical analysis and discussion which follows sets itself against this rich theoretical backdrop to consider the role and implications of challenge, confrontation and discomfort in environmental education and learning for sustainability.

Regarding the intellectual basis of the thesis, this chapters extends largely from discussions on environmental ethics and their operation within environmental education. As discussed in chapter 2, ecocentric positions have a long history within environmental education – for example, Aldo Leopold's Land Ethic infused within programmes, and outdoor education programmes seeking substantive connection with other ecologies which emerge from an ethic grounded most closely in that of the Deep Ecology movement (Goralnik and Nelson, 2011, Leopold, 1949, Devall and Sessions, 1985). Many of these ecocentric and biocentric visions of education enact an intrinsic care for the environment through their teachings and practice. These positions also resonate with those of a multicentirc and pluralistic basis, acknowledging the complexity and uncertainty in environmental action, and avoiding mechanistic and deontological prescriptions of moral duty toward the environment. However, this theoretical basis also uncovers a challenge to modern environmental education, as it operates from an instrumental positon, and within an educational system in the UK which also prioritises instrumentalism over pluralism and intrinsic moral action (Jickling and Wals, 2012). The opportunity then, is to uncover new ontological positions from which to understand the relationship between learning and the environment within outdoor environmental education. This chapter therefore concerns itself largely with objective(s) 3.

### 7.3 Empirical Analysis

This chapter places focuses on the role of discomfort in three areas; social, environmental and visceral. As has already been discussed in chapters 4 and 6, discomfort can arise as a result of changed routines, challenged social norms and interaction with others within the learning group. However, this chapter aims to take these discussions further and to focus on the relational manifestations of discomfort in residential learning settings and in association with the natural world. The three focus areas commented on in this section arise from detailed analysis of participant testimonies of learning in these settings, and connect to

and resonate with previous chapters. Rather than simply revisiting the previous themes of this study, this chapter discusses the place and role of discomfort as a direct pedagogical approach in constructing learner narratives in the outdoors, therefore connecting clearly with objectives 3 and to a lesser extent, 2.

### 7.3.1  Social Discomfort

As previously discussed in chapter 6, relationships between students and their accompanying adults were fundamental to the student experience of learning within a residential setting. Beyond this, the relational components of the experience pertaining to encounters with other ecologies also constituted a form of socialising, evocative of a relational ontology. This section explores the human social components which can be said to have invoked forms of discomfort. Although focusing specifically on this tenant of learning, these experiences do not sit in isolation from other areas of discussion which this chapter will go on to explore.

Socially, learning at both Embercombe and Slapton was undoubtedly rich, interesting and at times intense. Being in one another's company for such extended periods of time, was for many a new experience of socialising and constituted forms of discomfort commonly expressed in terms of 'space' and time alone:

> *"everyone's mood is a constantly changing is quite hard because not everyone is always the same mood so you're feeling quite tired, needing your own space and there is someone who is like a really good mood you wants to go a walk or something. That's quite hard, because… Yeah… I'm really looking forward having my own space in my bedroom really".*

> (Iona, Embercombe, Group C)

Iona's comment was expanded on further by Simon who suggested that there was a perceived pressure to socialise at Embercombe, meaning finding time alone was hard to do:

> *"It's kind of hard to be on all the time. Not ever, I don't know, if you're just like I need some time alone everyone would just be like what? I don't know, it would just be a bigger thing than, oh, I just need to be on my own for half an hour".*

(Simon, Embercombe, Group C)



*Photo 7.1 A group gathers on a hill overlooking Embercombe (group X, author photo).*

The comments made above by Simon and Iona are suggestive of both social intensity and a need to remove oneself from this intensity. Embercombe created particularly intense moments through a deeply emotional pedagogical approach (check-in circles and reflective activities). At Slapton, students tended to focus instead on the intensity of the learning itself, in particular the day length:

> *"What strikes me about this place, but the feeling I've come away with, is that there is an imbalance… From a scientific standpoint or whatever it's really interesting. Actually, I do like working outside a lot. Even if the walks are not great. It's just that, they don't really balance enough free time or independent study with what they do during the day. It's an eleven hour day effectively"*

> (Fay, Slapton, Group I)

These remarks connect with those made in chapter 4, where structural

challenges were discussed as foregrounding the social experiences of students undertaking residential learning. Although not directly relevant to a social conception of discomfort it is important to recognise that the pressure to 'be on' as noted by Simon earlier is also present in the form of formalised work – more so at Slapton than at Embercombe. In this way, 'being on', socially can come in many forms, both informal and formal – whether in 'work time' or 'free time'.

While at Embercombe social aspects emerging from 'free time' were readily commented on, at Slapton it was noted that there was very little free time once all the work was done:

> *"we don't get free time, so we stay up later in order to have a free time… when we come back from the fields, the break we get in between is not long enough [to socialise]".*

> (Lisa, Slapton Group I)

Despite this perceived lack of free time at Slapton, it was suggested that peer support amongst students was important, as commented on by Chris:

> *"There's no retreat, you can't just go back to your parents. Nobody else will be supportive of you… You have to depend on your friends".*

(Chris, Slapton, Group I)

*Photo 7.2 A group work together to collect data on the shingle ridge at Slapton Sands (Slapton, group H).*

Alongside discomfort associated with intensity of social interaction and the dependence on peer support, a particular kind of emotional discomfort emerged at Embercombe through daily social interaction. Embercombe regularly makes use of sharing circles, check-ins and reflective processes to draw out affective responses from participants on programmes. This is in fact a core aspect of the pedagogical model used in this setting. Students reacted differently to this approach, but were generally initially uneasy about the depth to which they were being asked to go emotionally, as expressed here by Jessica and Adam:

> *"At the beginning the silences were awkward… No one was really starting… except for adults and teachers and it was getting a bit weird".*

(Jessica, Embercombe, Group D)

*"At the start I found it quite challenging to talk in the circle. To actually say a full sentence, rather than just a bare minimum, like I woke up, I was okay, I was fine…*

(Adam, Embercombe, Group D)

However, the awkwardness and challenge associated with speaking out in front of peers was later acknowledged to have subsided in the group, with students reporting to have grown in confidence:

*"Now I feel the more confident to talking big rooms, or with a lot of people there".*

(Adam, Embercombe, Group D)

*"What I found difficult at the beginning… was the circles. Going round in a circle, and saying whatever, and answering a question, [was] really difficult. But it now everybody is used to it… that's a change I have noticed in our class".*

(Nydia, Embercombe, Group D)

*Photo 7.3 The use of circles to 'check in' was a regular occurrence at Embercombe where individuals were encouraged to speak out in front of the whole group (Embercombe, author photo).*

A final component of social apprehension and discomfort was uncovered in particular during a spring residential programme at Embercombe. The class had developed a culture of bullying or 'banter' as the students termed it, which had taken root deeply into the mind-set of the student, to the extent that it was seen by the class teacher as something which was inherently hard to shift. The programme staff and education team at Embercombe became witness to the extent of this bullying and eventually – four days into the programme – held an intervention with the expressed aim of preventing further harm from taking place and of changing the culture of the class.

This intervention was held in the form of a direct confrontation to the class, during which time each had a chance to state how they felt the 'banter' was affecting the class as well as how they would be part of the change:

> *"Isabel said –"although these habits of behaviour belong to the group, you as individuals have a power to change them. The only person you really*

*have any power over is yourself". JC Added – "no one is better or worse than you, you all bring your own gifts and are all special in your own way". The group took it in turns to go round the circle and respond one at a time. In this way the voices of the whole group were heard and some thoughtful things were said. I felt that their responses were coming from a place of honesty and openness".*

(Author's own field notes, Embercombe, Group B)

Once this intervention was made, work continued throughout the rest of the week with a noticeably changed tone and attitude from the students. Later, in discussion with a number of them, the 'banter' was commented on:

*"Here when we had this discussion, it makes us feel, when we had to say what I'm going to do… then you know yourself that you want to stop doing that, and you see the difference is going to make… It makes it actually want to stop. I think the teasing is going to be a lot better now that we realise what an actual difference it has, than just a teacher shouting at us".*

(Lester, Embercombe, Group B)

Lester's comment picks up on a theme concerning the role of the non-teacher educator at residential settings, already discussed in some detail in chapter 6. Adults not familiar to the learning group appear to have more influence on difficult issues such as bullying, at least for a short period of time, as noted by Errol:

*"I think the teasing thing, I think in school, my prediction is, is that it will start up again. And because the class doesn't really know you well, they will listen to you and respect you more than the teachers because when you know a teacher you can argue with them and have a little banter but if you with a stranger you have that respect. Maybe they could, I don't know once in a while bringing people or just do something that will stop the banter and the teasing. But of course it will still go on, but here there's less going on because of these big chat we've had and stuff like that".*

(Errol, Embercombe, Group B)

In sum, social discomfort has been seen to have been experienced in multiple forms at both Embercombe and Slapton – in ways which both emerge from, and mesh with, aspects of structure and relationships discussed in chapters 4 and 6

respectively. Differences in the ways in which social discomfort and challenges are experienced are evident between the case settings. While Slapton leaves less space for clear 'free time' expressed by students, the challenges of being in one another's company are still evident. At Embercombe however, emotional discomfort comes to the fore because of explicit pedagogical approaches working with the affective domain of learning. Moving on and beyond the purely social components of experience, this chapter now considers the role of the environment in provoking uncomfortable and challenging situations.

**A hot day on the rocky shore**

*Slapton, 19th July 2016, Group J*

We arrived at the rocky shore and the tide was on its way out, half way down the middle shore. The girls were excited by the prospect of finding things – "I want to find a hermit crab!" one shouted. Another student approaches me to show me a brittle star she had found, asking me what it is. The sun was hot and made for pleasant and relaxed exploring of the shoreline. We made our way out to the lower shore as it became uncovered, and upturned rocks looking for crabs – "I've found one!" shouted a student as she excitedly placed a hermit crab into a bucket. After a short while we all made our way to the beach to look at the finds. More sun cream was applied before returning to the lower shore in time for the apex of low tide.

Claire introduced a task where students are asked to assess the benefits and drawbacks of various ways of measuring abundance. One of the students asks about when lunch will be, and Claire responds that lunch will follow the next task. The group appear to be getting weary and the sun is now very hot. There is no shade on the beach either. We make our way back down to the lower shore to begin the investigation into the abundance of molluscs and sea weeds. On the way down, two of the students begin to lag behind and refuse to go further – complaining that they will fall over – "we'll wait here" they say before returning to the beach. With the rest of the group we sample the lower shore, and the students use the SACFOR scale to assess the abundance of marine molluscs and brown and red seaweeds. The students recorded their data on iPads. As this activity went on and we made our way back to the upper shore, the students became less happy to be in the sun and were ready for lunch – exclaiming that they were getting hot and hungry. We left the final data collection point until after lunch. The students huddled together and applied sun cream and C and I ate our lunch together on the beach.

After lunch we go back down to the beach to set up the data logger in one of the rock pools to measure salinity and temperature. There was a period of time of trying to get the equipment to work properly. During this time, the students were commenting on how hot they were and how they were getting fed up. Eventually the equipment began to work and we were able to track the changes in the rock pool as temperature rose. During this time, I noticed the three teachers walk away and talk to one another. Claire introduced the next part of the field work which was to be the final part of looking at how seaweed distribution changes across the shore zones. This was met with a considerable opposition by many of the students (although some of them got up and went to get their equipment without complaint). One of the students reacted (out of earshot of the tutor) "this is a joke now – who gives a damn about seaweed? It's too hot and everyone's burning". Another student complained she had a headache and I suggested she have some water to which she replied – "I don't want to drink because then I will need to go for a wee"… not wanting to wee outside. At this point, the teachers called Claire over to where they were standing. Claire came back and told me that the plan had changed and that we were going to cut the data collection short and head back to the buses due to the heat.

*Excerpt 7.2 A hot day on the rocky shore*

### 7.3.2 Environmental Discomfort

Environmentally, residential field settings can create feelings of dissonance and discomfort purely on merit of their being different to the student's home setting, as explored in chapter 4. This section, however, explores in more detail the ways in which environmental conditions, interactions and connections can operate as components of a pedagogy of discomfort to challenge and reconstruct worldviews.

Outdoor learning in the context in which it was examined during fieldwork for this thesis provided regular opportunities for discomfort, or challenge to emerge in association with the environment and setting in which it took place. While initial thoughts turn to the interactions of students in the outdoors, the first and often noted way in which students at both settings noted discomfort was with the setting itself, including infrastructure. While at Slapton most of the rooms were en suite, the accommodation at Embercombe was rather more basic, with students staying in yurts. Socially, this presented itself as a challenge for some, as previously discussed. However, within this new setting came other challenges relating to the environment itself as expressed by Sam.

> *"I was coming from my house, which was warm and had central heating and stuff, and I was coming to a place where I had to light a fire every night just to keep myself warm, and to have one million layers on…"*

(Sam, Embercombe, Group B)

*Photo 7.4 A view inside one of the yurts at Embercombe.  (author's photo).*

The changed routines and comparisons to school, already discussed in chapter 4 also challenged students in terms of the new settings in which they tool place. The pace of the work, but also the physicality of the work which took place at Embercombe created a degree of discomfort for some students such as Nicole:

> *"Usually at school, were sitting down at desks or sometimes play a game outside, but at first it seemed quite difficult because we weren't really used to this kind of environment- working, heaving stuff. We were working for a longer period each day until 6 o'clock. We did have longer breaks and stuff, but it's just different. Maybe, because it's a different environment in might affect you in some other way".*

(Nicole, Embercombe, Group B)

As expressed here by Nicole, not 'being used to it' was a major component of much of the environmental discomfort associated not only with the living and sleeping arrangements at Embercombe, but also the work and tasks which students undertook. Cobbing was one such task which provoked feelings of discomfort amongst students:

*"Certain activities, like the cobbing… I found that really challenging because it was cold, and a clay is a bit strawy and … It's a bit muddy. But, you know, also it's not my cup of tea, but I would like to work more on things which aren't my cup of tea".*

(Simon, Embercombe, Group C)



*Photo 7.5 Bare feet 'puddling' cob in preparation for a building project at Embercombe (author photo).*

While cobbing is not his 'cup of tea', Simon recognises that because it is outside of his comfort zone, this is something he wants to work on. The idea then of challenge through work became a theme for students during their time at Embercombe. At Slapton, too, challenge through the demands of work and the associated learning was noted, however, this time the demands were mostly felt through the long days:

*"I feel like the beginning was good because it was new, like we haven't done it before, and we were learning stuff. But then after we had learnt stuff we just carried on and it was a bit of a long day even though it was only a couple of hours. It felt like we've been there from breakfast to dinner".*

(Rachel, Slapton, Group J)

While Rachel, and others, reactions to the long day and demands of work at Slaton has been discussed at length in chapter 4, it is necessary to return to this aspect of life at Slapton briefly in this chapter. Slapton's living conditions were generally without discomfort or challenge, and thus didn't appear in conversations and reflections with students. While the work was the main challenge, the environment in which the students were to call home for their time at Slapton was broadly recognizable as a 'home environment', which created a feeling of dissonance amongst students who felt that they were being asked to take part in hard work and long days:

> *"What strikes me about this place, but the feeling I've come away with, is that there is an imbalance… They don't really balance enough free time or independent study with what they do during the day. It's an eleven hour day effectively".*

(Fay, Slapton, Group I)

However, it was recognised that this feeling of being stretched was to do with not being used to the work at Slapton, similarly to comments made at Embercombe':

> *"I think the point is that maybe none of us are used to it. None of us have done it before. None of us have done eleven hours straight of constant biology. Usually we would have five hours of biology in a week. Whereas today with an eight or eleven hours a day".*

(Shaun, Slapton, Group I)

Some also noted that the pedagogy was different, indicating that a new way of learning was going to be challenging, as articulated by Sammy:

> *"Yeah, it's a different method of learning that not many of us are used to. Of course, trying new things can be tiring".*

(Sammy, Slapton, Group I)

While the day length itself is clearly a structural challenge as well as an environmental challenge, many of the students found the environment of focus for the field days difficulty, conjuring a mixture of reactions including frustration, anger and fright. For many, the field sites visited at Slapton were seen as alien

and scary, as was demonstrated when one group visited the rocky shore for a biology day examining rock pools. The weather that day was intensely hot (I noted in my personal notes that the day was set to be the hottest of the year, in the high twenties), which played a significant role in provoking the following reactions from students. For some, such as Lola and Sara, the physical challenges presented themselves first:

> *"it was quite uncomfortable because the rocks themselves were uncomfortable and it was so hot. We couldn't stand properly, so our feet were hurting, you can sit down because your bun with hurt, because your sitting on rocks".*

(Lola, Slapton, Group J)

> *"it was just dangerous. I don't do outdoors as it is, and not slimy seaweed and rocks. Everybody was nearly falling over, I just thought it's really not worth it. We were only taking one reading down there anyway, I just thought we would only have to track back. So I thought there's no point".*

(Sara, Slapton, Group J)

*Photo 7.6 Students explore the 'rocky shore' near East Prawle (Slapton, Group J, author photo).*

As the day progressed, frustrations were beginning to rise as the students became hotter and more uncomfortable in the sun. Many of the students that day commented that they felt that they had spent too long down at the rock pools, and that time seemed to be going by very slowly, as exemplified by Rachel and Lauren:

> *"I feel like the beginning was good because it was new, like we haven't done it before, and we were learning stuff. But then after we had learnt stuff we just carried on and it was a bit of a long day even though it was only a couple of hours. It felt like we've been there from breakfast to dinner. The sun was a bit too intense to concentrate properly".*

(Rachel, Slapton, Group J)

> *"I think it was just the sun… it wasn't what we were doing. I think it was the fact that it was that hot. She was giving us a lot longer than we needed for the tasks as well".*

(Lauren, Slapton Group J)

Toward the end of the day, the students were clearly becoming upset and many of them simply refused to continue to work (they were monitoring salinity changes in a rockpool). Tensions began to rise and it became clear that we would have to leave the beach, as detailed in my notes from the day:

> *Chloe introduced the next part of the field work which was to be the final part of looking at how seaweed distribution changes across the shore zones. This was met with a considerable opposition by many of the students (although some of them got up and went to get their equipment without complaint). One of the students reacted (out of earshot of Chloe) "this is a joke now – who gives a damn about seaweed? It's too hot and everyone's burning". Another student complained she had a headache and I suggested she have some water to which she replied – "I don't want to drink because then I will need to go for a wee"… not wanting to wee outside.*

(Author's notes, Slapton, Group J)

*Photo 7.7 "[We were] looking for limpets… It's different actually seeing it in person, because we do it all the time in class, …but when you see it in real life, it's like, oh this is what we've been learning about and talking about. Actually, seeing it, it's good" (Slapton, group J, participant photo).*

Additionally, two of the students who had initially refused to go to the further rock pools were becoming clearly perplexed by being at the field site and were insistent that it was time to go back to the field centre. I sensed that this was due to more than just the heat down at the rock pools. I waited until later in the evening to ask them about this, to which Sara offered the following response:

> *"Down there I felt a lot further away from life, although we were looking at life. I just felt away from the world. And we were low, I felt quite claustrophobic in a way even though was even the really big space. But just really on your own. I felt stranded".*

Clearly, the environment itself presented a challenge to Sara, regardless of the conditions of the day and the work being done. This comment seemed strange, until it was later paired with the initial comments made by students when we first arrived at the rocky shore:

*The girls were excited by the prospect of finding things – "I want to find a hermit crab!" one shouted. Another student approached me [with] a brittle star she had found, asking me what it was … We made our way out to the lower shore as it became uncovered, and upturned rocks looking for crabs – "I've found one!" shouted a student as she excitedly placed a hermit crab into a bucket.*

(Author's notes, Slapton, Group J)

Students commented that they found the initial exploration of the shore interesting:

> *"I feel like the beginning was good because it was new, like we haven't done it before, and we were learning stuff".*

> (Rachel, Slapton, Group J)

Yet, this quickly turned into feelings of discomfort associated with the heat as well as Sara's own reaction to the space – claustrophobic and stranded. The unusual qualities of the environment – openness, strangeness and vastness were fascinating and intriguing as well as bewildering and challenging. It became clear that the environment itself was no static container for field experiences to these students, and was instead interacting with and alongside the students themselves. The organisms and material environment in this sense was a pedagogical collaborator, resisting the structural norms and environmental niceness of 'home', and unveiling emergent qualities of uncertainty, the unknown and the uncomfortable.

It wasn't only the environment of the rocky shore that provoked these contrasting and dissonant reactions in students. To continue the explorations into the fascinating propensity for the environment to 'convene' field experiences in this way, it is necessary to shift our view from simply considering 'environment' as a static receiver and receptacle and toward a less tangible, relational understanding of the setting in which outdoor learning takes place. For this

reason, the final part of this chapter shifts its attention toward what is termed 'visceral connections'. It is these visceral connection and encounters with other ecologies that is presented as the central contribution of this chapter to the aim and objectives of this thesis. By making use of relational ontological understandings of encounters with non-human actors, the lived, and learning experiences previously discussed, along with their associated challenges, are seen to be co-curated by the material and ecological constituents of the setting.

### 7.3.3 Visceral Connections and Encounters with Other Ecologies

Beyond the clear encounters with 'environment', ranging from the weather, to living accommodation and the field sites themselves there is much to be considered regarding the assemblages of interactions involving place and ecology which give rise to feelings of dissonance and discomfort. However, these feelings are far from clearly difficult or even uncomfortable, for they operate at a deep level which makes them hard to place within the confines of dualistic associations with good and bad feelings. Interactions with other ecologies are seen to be fundamental to the experiences of learning in the field, whether framed as 'uncomfortable', or not. These interactions are, by their very nature, reciprocal exchanges, and therefore relational components of learning. By placing specific focus on the collaborative nature of the non-human world in this way, this final section makes important contributions to this thesis, by arguing that relational components of outdoor learning are essential components of student experience, which move beyond an instrumental understanding of environmental education.

This section makes use of three key encounters with other ecologies which acted to disturb narratives of the natural world and environmental understandings. All three encounters entailed degrees of discomfort, yet they were also diffuse and hard to classify as 'good learning'. Two of the encounters are from Slapton and the third is from Embercombe.

#### 7.3.3.1    Encounter one: Insects in the woods

This encounter focuses on a humid day in Slapton Woods with a group of A-level biology students who were tasked with carrying out leaf litter surveys. As time goes on it became evident that many of the students were finding the activity challenging. Some of the students found it hard to be near the insects – many of which are small spiders which they found in the leaf litter sample trays.

Once the leaves are placed into the tray, some of the girls don't want to search for insects. A bottle of hand sanitiser is passed round – *"you've touched the leaves – do you want to sanitise your hands?"* – Another student exclaims – *"this is disgusting".*

*(Author's notes, Slapton, Group F)*



*Photo 7.8 "I think this is when my attitude changed in the woods because at the beginning I was I was really scared of insects and everything, but when we actually got hands-on and looked through the mud and everything…. When the spiders are actually in the pot, and I know that it's actually concealed I can look at them, and I would never have done before because whenever I see insects I just run away and try and get rid of them" (Slapton, group I, participant photo).*

In addition to the insect life on the ground – the air was also filled with flies which were bothering some of the students:

I noticed that one of the students had zipped his waterproof top right up and has the hood up – people notice and begin to laugh. He responds with a muffled voice – *"the bugs!"* he exclaimed – *"I hate them! … this is too close to nature for me miss".*

(Author's notes, Slapton, Group F)

Later, I spoke to some of the students about the experiences in the woods. Speaking about her surprise at the number of insects in the leaf litter sample, Lizzy responded:

*"…I [said], don't [lay the quadrat] there because there's not going to be anything. And then all these things, all these spiders came crawling out and I was like, oh okay! So, yeah, that just showed me that when you're walking through the woods there are so many [insects]…"*

Adding:

*"I must have killed so many insects by walking in the woods. Poor little things".*

(Lizzy, Slapton, Group F)

Reflecting on this, Kirsty commented on the difference being away from home makes in the considering of other than human life and the response to finding a spider in the house:

*"Normally, when I'm at home I would kill a spider just like that - with my shoe - I wouldn't think twice about it and I [would] be like, oh, it doesn't matter anyway because it's nothing. When were at home, we're not in the countryside so we don't even have to consider it. You don't really get a lot of bugs where we are, unless you have your window open and light on, and you get moth or something…"*

(Kirsty, Slapton, Group F)

Kim continued, saying:

*"If [a moth] was in my room, I would whack it straightaway so that it would be gone. But [here] in the woods… I actually feel a bit bad. Like, I've been slapping you with a shoe! I feel quite horrible. And you're looking at them,*

*and [thinking], they're actually living and crawling and they've got everything in their body… they've got legs and they move… They're actually a bit like us. Do you know what I mean? They are alive. And it's weird to think about it like that".*

(Kim, Slapton, Group F)

In this encounter, it is interesting to observe the difference in feeling and attitude that was provoked by an otherwise 'uncomfortable' experience. Discomfort in this case was a way of conveying feelings pertaining to the unknown and different. As commented on by Kirsty, the lack of interaction at home meant that the woods became an alien and uncertain environment in which to work, provoking [initially] negative reactions in many of the students. However, as expressed by Kim, exposure to this world led later to a reflection that began to build connection and appreciation for this 'otherness' of the non-human world which inhabits Slapton woods.

The woods are clearly a different environment to the towns and cities of many of the students who visit Slapton, and so seeking this difference and the discomfort that comes with it is not hard. However, similar reactions of challenge associated with the discomfort of the non-human world were observed elsewhere where material aspects of the environment acts alongside the ecological. The next encounter occurred on the coast in Start Bay.

### 7.3.3.2    Encounter two: A changing coast

This example details an A level field course which had a coastal component, involving a day out on the coast of Start Bay in South Devon. One of the appeals of this coastline for A level geographers is its rapidly changing nature. Coastal erosion has been a significant problem for communities at Slapton Sands for decades, with the main road and the three main settlements in the Bay under increasing threat with significant storms in 2001 and 2014 causing large scale damage. Most recently, during the winter of 2015 - 2016, the beach in front of Torcross was drastically reduced as a result of a long term trend of westerly winds, leaving the settlement vulnerable to winter easterly storms. The sea wall which had been built in 1980 was undermined and began to rotate forward, while an older section of defences in the north of the settlement collapsed completely leaving the road behind subject to serious wave damage. The result was the

closure of the road and remedial works carried out by the environment agency on the main sea wall, while the destroyed section had to be rebuilt entirely. This encounter details the response of a group who experienced the coastline in Start Bay during this time.



*Photo 7.9 "I chose this [photo] because I felt it highlighted the whole reason why we are investigating this stretch of coastline… The fact that it really needs to be protected. It's constantly changing, and it constantly requires protection" (Slapton, group G, participant photo).*

Pointing to the houses, a student commented on the state of the houses with surprise – especially considering the calm conditions on the day:

> *"They all seem to have boards up. On the front, downstairs windows… like they been smashed or they were protecting them in case there was a storm or something. They all seem to be really cautious about the fact that there was going to be waves coming over the top, like it's happened before".*

> (Cai, Slapton, Group G)

The following day, some of the students recounted to me how it made them feel to see such damage on the coast:

*"…the seawall had literally started to fall away, and the massive crack that has appeared… You feel sorry for the people that are living, or used to live there in the cottages. It's not nice".*

(Hamid, Slapton, Group G)

The concern for the residents of Torcross who are subject to such damage from the sea, as voiced by Hamid also prompted reflection on the fact that this was relatively novel for the students as they live far from the sea:

*"And I think, because we live right in the middle of the country we don't see these coastal things like, it's not a problem where we live because there is no coast. So… seeing all these things, it's mad".*

(Cai, Slapton, Group G)

Naturally this comment led to further discussion on climate change and sea level rise. The witnessing of localised destruction of houses and sea defences in Devon, prompted a widening of concern for those who live further from the sea, including the students themselves:

*"It's scary thinking about …sea level[s] rising at such a rapid rate. It brings home the whole climate change and global warming [stuff]… because we aren't really affected by it at all. If this is going to happen, this is obviously going to have an impact on us, because if sea levels do rise more people have to, I suppose, come into our local area, inland. They will have to come into where we live…"*

(Polly, Slapton, Group G)

This encounter is notably different to the first, as it involves interaction with mainly infrastructure, albeit damage by the ocean. However, the power that seeing this damage – even on a calm day in the aftermath - was evident by the student's own reflections. Several observations can be made. Firstly, the initial reaction was pity and shock on behalf of the residents of Torcross. This concern was later widened to include concern for others (including the students themselves), due to the knock on effects of such events exacerbated by climate change. Secondly,

student's engagement with the aftereffects of coastal flooding and erosion could be potentially noted to have been superficial by some accounts in the field, as it was only later, upon reflection, that students began to drill deeper into what they had experienced – or at least voiced it to one another. Thirdly, the accidentalness of the encounter is notable. The tutor leading the group would have visited Torcross regardless of whether a storm had passed recently. The coincidental nature of the trip aligns itself with a narrative of reciprocal and collaborative learning between learner and their world.

The third and final encounter moves away from a purely emergent dissonance and discomfort and instead concerns itself with the explicit, and deliberate discomforting of learners through a pre-orchestrated activity at Embercombe.

### 7.3.3.3    Encounter three: The Deer

Moving away from the chance meetings with uncomfortable aspects of the natural world, this encounter focuses on an aspect of programme design in which an optional task was presented to the group, designed to discomfort and challenge. The recently shot body of a deer was brought to the site, on the third or fourth full day. The group were then invited to take part in the skinning and butchering of the deer in order to prepare the meat for an evening meal. The hunter who shot the deer led the activity alongside Embercombe facilitators.

*Excerpt 7.3 Butchering the deer.*

Much of the preparation of the deer was undertaken almost as an act of ritual – permeated with a metaphysical significance made plain by the words of one of the Embercombe facilitators before the body of the animal was brought out:

> *"This deer has felt the wind and the rain, it felt the thunder the other night, it knew the paths and tracks around here - some of which you will have walked, it knew the beauty of the flowers and the trees, it will have played with and known others of its kind, and of its own age – just like you. This deer is now passing from the deer's world into the human's world – and whether you take part in this, whether you eat this animal or not, this deer will always be a part of your world – and it will be returned to the world for a new story to begin".*

*Photo 7.10 Meeting the deer (photo credit: Norwich Steiner School).*

Joey's words speak to conceptions of continuousness between humans and animals, and the challenging of conceptual boundaries in an effort to learn from one another. This notion that the metaphysical transformation of the deer speaks to aspects of human empathy and understanding about life and death was in turn articulated by the students following the encounter:

*"I think it was quite … emotive to think that there's this animal that's been born has had a life and lived, you know- a being that has had ups and downs, whether as a deer or anything. I just see it as an animal that has had a whole life - seeing it as a full being and then just seeing it as a slab of meat which is for consumption".*

(Izzie, Embercombe, Group C)

However, the more immediate physical transformation of the deer was also noted by many students:

*"I think one of the most important moments for me was how quickly all of us became accustomed to it. I'll never forget that. All of us seeing the deer*

*being brought out… [There were] squeals, and all of our faces were pale and stricken with disgust, and then… After the head, the legs, the opening of the stomach… I feel like, suddenly, within a matter of minutes… fifteen minutes, twenty minutes, whatever - we all became accustomed, and we were all okay with it… I think that was really interesting, because suddenly when we saw the meat it became, familiar because I think most of us have seen meat before".*

(Izzy, Embercombe, Group C)

Recognising a shift in the comfort of the group, I asked some of the girls who were standing beside me how they felt once the skinning had begun. Judy replied:

*"I feel less sorry for [the deer] – it's changed. I feel less feeling for it because it's no longer an animal – well it is, but it's less furry and cute now".*

(Judy, Embercombe, Group C)

Another girl, Iona, noted the visceral nature of the experience and, similar to Judy, how this became easier to be a part of as the butchery continued:

*"It's easier to look at now. I think it's good that I stayed. If found it really hard when the legs were snapped – the sound was just so gross. Also, when the head was sawn off and when the body was moved… it was just so much like a body. It was really heavy and blood was coming out of it".*

(Iona, Embercombe, Group C)

Once the last joint had been sent to the kitchen and the area had been cleaned up we all made our way to the garden to hold a discussion reflecting on the events of the morning. Many of the students mentioned a change which they had witnessed:

*"there was a transformation… it was like an animal – then the legs came off, then the head and you could see it was meat and less like a deer".*

(Laura, Embercombe, Group C)

*"When I saw it as a block of meat, I felt disconnected from it – there was no emotional connection. That was interesting".*

(Fred, Embercombe, Group C)

Students such as Ollie noted the importance of being directly involved with the process:

> *"I think it's kind of like, you know how Corrie* [a staff member who had spoken about refugees in Europe on the previous day] *was talking about the refugees and how you can see it on the news and you can see what's going on and you can think that's awful, but you don't really, you can't really… I don't know, it's a very different feeling to actually being there in the moment while it's happening".*

(Ollie, Embercombe, Group D)



*Photo 7.11 Skinning begins (photo credit: Norwich Steiner School).*

Nydia makes a distinction between being directly involved and being remote from such events, and teases out some particular dimensions of direct participation:

> *"there's a level of separation. It's like seeing it in a movie, when you know it's fake. When you do see one of those videos from warehouses when you know it's not fake but there is still a level of, it's behind the screen. When you're actually there, it's happening, and in a sense it's my fault because I'm going to eat meat. So like, it's just different and essential and*

*I think everyone eats meat, and even if they don't at some point in their life needs to see that".*

(Nydia, Embercombe, Group D)

This encounter acted in specific ways to provoke unease and discomfort among the participants. While many of the students noted the way in which the physical transformation took place, with deer body becoming carcass, and later simply butchered meat, they also noted how their feelings changed. The transformation which took place was accompanied by a changed perspective for the participants who clearly became more at ease with the deer once it was considered meat – recognised as 'a level of separation' by Nydia. In addition, the emotional aspect of the experience changed alongside, with the regarded 'separation' leading to what Fred noted as an emotional disconnection. These simple observations aside, it also appeared that a concurrent narrative ran through the experience for many of the students, which in turn mirrored the previous encounters documented in this chapter. A relational and reciprocal concern for the life of the deer was orchestrated by Joey at the opening of the activity, almost ritualistically. In addition, the students themselves noted their own feelings for the life of the deer and spoke of kinship and connection.

This encounter concludes the empirical analysis section of the chapter. In the conclusions, these encounters are returned to and made use of to understand the empirical content presented here in a conceptual context, as well as how they connect with the research objectives of this thesis.

### 7.4 Conclusion

In examples given in this chapter, challenging situations arose during otherwise mundane interactions, ranging from the living conditions, to the location in which learning was taking place. This chapter sought to understand these situations of discomfort from a less explicit point of view, making use of more ephemeral and visceral incarnations of challenge and discomfort in the field. In conclusion, several points can be brought to the fore and expanded upon considering the literature and objectives of the thesis, making important contributions along the way.

Although considered in some detail already, social aspects of discomfort in both locations have been expanded on in this chapter, beyond that already covered in

chapter 6. Notably, 'learning away' appears socially rich and at the same time intense. It has already been established that the social benefits of residential learning are apparent (Away, 2015), yet, as this chapter has demonstrated, these relationships are not always clearly built comfortably. Students reported being challenged by the increased time spent together, reporting feelings of intensity recognised by Foran (2005). At Embercombe this was due to the depth of emotional engagement encouraged through pedagogical approach, while at Slapton, the perceived high workloads placed strain on relationships. In both locations a structural challenge presented itself which effected student's relationships with one another.

Some students at Embercombe felt that they needed additional space, away from the group. Intense social interaction placed an uncomfortable weight upon some of the more introverted students, which, although difficult, elicited understandings pertaining to their own social needs – contributing to their own getting to know themselves as well as each other. The deepened emotional engagement through an affective pedagogical approach further enhanced this at Embercombe, as observed through the practice of sharing during a morning check-in and the encouragement of reflection following each activity. A shift was noted by students throughout the week, whereby discomfort at entering affective domains moved toward an acceptance of this 'way of being with one another'.

Students in both locations noted a pressure to 'be on' during the time spent learning away. This merges with the social intensity already discussed, but also connects with the contribution that the environmental conditions made to the overall experience. 'Being on' came in many forms, from a perceived lack of free time at Slapton, to an emotional emersion at Embercombe. It also speaks to the intensity of the working day in both locations, with long hours and hard physical work. However, this was coupled with a social support widely reported in both locations, where the enriched and enhanced relationships already discussed in chapter 6 were the focus outcome of many of the more 'challenging' of times experienced by students.

The culture of challenge brought forward by time spent in the outdoors, engaging experientially both with curriculum subject matter and less formal learning, along with the social intensity described earlier also enabled the important broaching of difficult issues within the group. One such issue has been described in this

chapter regarding a culture of bullying within a group visiting Embercombe. While nothing can be said of the continuation of this culture back at school, it can be noted that an opening is made in the social fabric of the group in which interventions are possible. That is to say, issues which have become deep rooted over time are suddenly up for discussion when placed into new contexts. The role of the 'non-teacher adult' in these contexts seems important for challenging deeply held beliefs and norms, given that they occupy a space which is unobtainable by the group teacher due to their enmeshment with the pre-existing culture of the group.

On occasions, students noted that the experiences available to them in the residential locations were environmentally different, and that their not being used to it was a factor in shaping their attitudes toward the environment and the learning in which they were taking part. This overall experience was however, different in each location. The difference presented itself in one particular important way – at Embercombe the 'newness' of experience which was outside of most student's comfort zones could be seen to entail a whole 'lived experience' involving living conditions and learning environments. At Slapton, however, these differences were present, but mostly in terms of the outdoor environment in which the learning took place (and to a lesser extent the pedagogy which accompanied them). Living conditions at Slapton were seen by many students to be comfortable and, on the whole, recognisable from home. Two important insights can be taken from this. Firstly, at Slapton, a dissonance was created whereby students noted an 'imbalance' between the living and learning experiences of being in the residential setting, understood through a disconnect between the experiences of learning in the day, and that of living and socialising in the evening. Secondly, because of this perceived compartmentalisation of experiences which were at the same time comfortable and uncomfortable, Slapton appeared less as a direct challenge to student's home way of life. Embercombe on the other hand, appeared to challenge ways of being and ways of relating across the whole of students experiences while there, both in terms of living and learning, situated as a 'frame of mind' (Bonnett, 2002).

The physical environment presented obvious challenges to students – not least through weather and terrain. While these aspects of learning outdoors might be initially thought of a separate yet complementary aspects of student experience,

it is noted in this chapter that the relationship between learning and the environment is complex and messy. The material environment created opportunities for experience which could not be replicated – emergent forms of discomfort appeared with regards to the weather, such as was the case in the example on the rocky shore. In this way, the environment acted back against the expectations and understandings of students, and sometimes staff, to create emergent experiences.

Perhaps most importantly in approaching objective three, and thus the main thrust of this thesis are the ecological and material aspects of these experiences. From the point of view of a reciprocal outdoor learning experience, the setting becomes a collaborator and curator of the learning experience, arguably more significant than pedagogy. The three encounters deployed at the end of this chapter make the case that the emergent and unpredictable facets of environment contribute in untold ways to the experiences, expectations and understandings which students hold. In particular, the three occasions focused on in the final part of this chapter suggest that in the most significant of cases, these experiences have the power to challenge and reconstruct environmental narratives, at least in the short term. In any case, coming close to nature, and experiencing the environment entails much more than simply sightseeing and taking notes – from the accounts of these students, the ecological and material encounters of the field, whether orchestrated or unexpected, are important aspects of outdoor and experiential learning. In this way, interactions with other ecologies are examined not as incidental facets of outdoor learning, but essential to the emergent outcome – with relationship held at the centre of the experience.

In order to underline the contribution that this chapter makes toward objective three, and in moving toward the relational ontological position highlighted in chapter 2 and in the introduction to this chapter, we might begin by turning to the insights of ecopsychology and its associated literature. In particular, ecotherapists work in outdoor environments, in connection with other-than-human entities, where plants, animals and non-sentient beings are available to provoke transformative experiences at what Buzzell and Chalquist (2010) call the 'mind-body-world' intersection. For ecotherapists, this transformation entails the natural world 'performing' and helping participants to critically examine personal and societal narratives, feelings and attributed behaviours (e.g. Jordan, 2014,

Greenleaf et al., 2014, Buzzell and Chalquist, 2010, Clinebell, 2013). Writing about encounters with other ecologies, Conradson (2005) comments that "environmental encounters are in part appreciated for their capacity to move us to think and feel differently… [and] in coming close to other ecologies and rhythms of life we may [find] different perspectives upon our circumstances". We might therefore begin to understand the encounter with the storm-wracked village of Torcross, the insects in Slapton Woods, and the deer at Embercombe from a relational standpoint, in which place-making is enmeshed with the discomfort felt by students faced with other ecologies. In a sense, these non-human actors can be said to have 'performed' at the intersection of 'mind-body-world'. These encounters provoked a questioning of social narratives and feelings, although sometimes feelings of discomfort are not explicit and are instead implied in the later reflection. In the field, the students were focused on data collection and it was only later that the students began to consider the feelings which the encounter provoked. This raises once more the apparent importance of reflection and peer discussion in situating and making sense of experience, largely established in the field of experiential learning, but still underused in outdoor environmental education (Moon, 2004).

Mary-Jayne Rust (2014) explores the notion of reconciliation with discomfort in order to reconnect ourselves with the rest of nature, making use of what she terms 'dissolving into boundlessness'. The initial squeamishness in interacting with the non-human environment which later gives way to eventual recognition of the other as being "a bit like us", as described by Kim in the Slapton Wood encounter, might be considered the beginnings of a 'dissolving into boundlessness'. The encounters detailed in this chapter pushed the thresholds of the participant's understanding of the world, and relied upon the co-performance of both human and non-human subjects for such confrontation to occur. The main facilitator of this type of interaction where learners are challenged and discomforted by experiences leading to a revaluation of attitudes and beliefs might be seen to be the place making of learning itself. We see that place is co-created in 'performance' with non-human others, and that the production of place including values and attitudes originate from being in the 'space of the other'. Noted by Bonnett (2013), a 'mutually sustaining relationship' is in existence here, in which (non-human) nature acts alongside students to

contribute to the performance of their co-created 'life-worlds' (p.267). By moving toward a relational understanding of outdoor learning, place is mutually produced in order that it becomes a "source of meaning, intrinsic value and identity" (p. 267), and that the otherness of nature is active in participation, rather than as a backdrop, to anthropocentric experience of space and production of place.

# Chapter 8    Conclusions and Implications

## 8.1 Context

### 8.1.1   Chapter introduction

This research has positioned itself as an examination of environmental education in the UK during a time of great uncertainty and crisis. The early motivations of environmental education as Rachel Carson (1962) wrote Silent Spring and the Club of Rome published the Limits to Growth (Meadows et al., 1972) still ring true, yet many more complexities and 'wicked problems' have asserted themselves (Brown et al., 2010). The impetus for action in a changing world is driven by uncertainty, yet also a knowledge that societal behaviour change is necessary to avert the worst of global biodiversity loss, climate change, starvation, social injustices and many more large-scale issues which make up the multiple crisis syndrome with which we are faced (Selby and Kagawa, 2015a). The question of how to learn in this changing world is at the forefront of discussion within environmental and sustainability education (Wals, 2007a).

This research has engaged with environmental education programmes taking place in a residential context in the UK to appreciate the ways in which environmental narratives are constructed and challenged in these settings. Four themes emerged from this research: structure, choice, relationships and discomfort. These themes formed the basis for empirical analysis and discussion and are considered here in accordance with the am and objectives of the thesis. This final chapter brings together the outcomes of each of the empirical strands covered in the four previous chapters into a concluding whole. While each of these four themes have fed into one another it is also necessary to provide a complete picture of the findings of this work, in conjunction with the aim and objectives of the thesis. The purpose of this chapter, therefore, is to offer the reader both a synopsis of the findings, while weaving a purposeful narrative with which to understand the thematic nature of the thesis.

This chapter begins with a reminder of the historical context of the research; concerning the environmental movement and the development of environmental education against a backdrop of rapid environmental and societal change. The chapter then summarises the theoretical framework and conceptual tensions which have guided the research before moving on to consider the aim and objectives considering both the theoretical as well as empirical material.

Following discussion of specific objectives, the research contributions this work has made to geography and education are underlined. Implications for educational practice are then made alongside a discussion on the limitations of problems which arose during the research. The chapter concludes with a brief autobiographical reflection.

### 8.1.2 Historical background

Environmental education has existed in a fluctuating state since its global recognition in the second half of the 20th Century. The mix of environmental education initiatives which populated pedagogical practice broadly aimed to produce a citizenry equipped with pro-environmental attitudes and behaviours (Hungerford and Volk, 1990, Jickling, 2003). Against a backdrop of booming populations, habitat loss and multiple threats to biodiversity, the environmental movement found itself centre stage and pressure grew to find ways to counter a wide-spread decline of environmental health. As environmental education programmes grew in their reach and prominence, backed up by a number of global declarations; new terminologies appeared to describe the globalised phenomena the environmental movement was witnessing (Jickling and Sterling, 2017b). Sustainability became a watchword of those wishing to see a 'limit to growth' and the accompanying mindset of consumption, while broader conceptualisations of sustainability education included aspects of social justice, contained within citizenship education (Zembylas and Chubbuck, 2009). As the 20th Century came to a close, Education for Sustainable Development had largely subsumed the global environmental education agenda, yet remained a large-scale response, alongside the global sustainable development goals. On the ground, environmental education programmes continue to run, and in the UK, the largest environmental education charity, the Field Studies Council, continues to offer its programmes to thousands of young people every year (FSC, 2015a).

Environmental education and outdoor learning often occur together and entail both a curriculum and non-curriculum focus. In secondary education in the UK formal education makes use of outdoor environmental education for fulfilling aspects of the science specification at A-level and GCSE, especially for biology, while geography has been seen to be synonymous with fieldtrips. Informal environmental education programmes have also been promoted for their ability to support wellbeing, physical health and social development, and have found

themselves part of the mixed approach to learning in the outdoors in the UK (Capaldi et al., 2015, Kendall and Rodger, 2015). Many of these programmes occur as residential field trips and programmes which take place at across the UK. Two organisations involved in environmental education residentials in the South West of the UK formed the focus of this research; the Field Studies Council, and Embercombe. Regarded as representations of environmental education programme providers from largely different perspectives, the two case settings operated as opportunities to examine conceptual undercurrents and tensions in practice.

### 8.1.3  Theoretical framework

Environmental and sustainability education initiatives debate the best approach to pursue in light of the worsening state of the ecological and social environment. Some claim an objective approach is necessary – to pursue the answers which we already have and to create a sustainable future without deliberation (Kopnina, 2015), exemplified by the United Nations' Sustainable Development Goals (UN, 2015). Others point out the uncertainty with which we are faced is too great for such deterministic outcomes to be successful, and that education should work on an ethical basis, aiming to equip learners with the critical skills with which to become creative, pluralistic and innovative citizens, able to create a sustainable future in an age of ambiguity (Jickling, 1992, Wals, 2011, Sterling, 2001).

These positions are largely at odds with one another. However, it has been noted that environmental education and sustainability education have been typified by an instrumental objective approach (Jickling and Wals, 2012). Historically, environmental education has been subject to a belief that knowledge equals behaviour change, and despite much in the way of evidence that learner behaviour results from a much more complicated arrangement of emotions, attitudes and norms, many environmental educators adhere to this approach (Hungerford and Volk, 1990). Instrumentalism is the dominant paradigm within which the education system and environmental education more specifically operate, yet critical thinking skills are much sought after while building ethical foundations are key to many approaches within citizenship education. While a tension has been noted between these positions, termed instrumental and emancipatory learning approaches, it has also been postulated that a blended approach might be more suitable for exploring opportunities which exist between

personal direction and agency, emerging from an emancipatory positions, and structural objective approaches, emerging form an instrumental position (Wals, 2010b, Wals et al., 2008).

Furthermore, it is acknowledge that in order for sustainability education to become more responsive to the crises faced by the environmental movement, a more rounded approach is required to move beyond the 'stunted epistemology' which has typified environmental and sustainability education since their conception (Selby et al., 2015). Environmental education has been prompted by some to envision sustainability as a 'frame of mind', in order to prompt an "imaginative and creative entanglement with the world"(Selby and Kagawa, 2014 p.278), appealing to both emotional and knowledge based approaches to learning (Curry, 2011, Bonnett, 2002). From this standpoint, the role of the wider environment is also placed under pedagogical scrutiny, and outdoor learning is seen to offer opportunities for moving beyond 'nature based', and toward 'nature-attentive' environmental education (Nicol, 2014). In connection to this point, environmental education programmes have been increasingly prompted to adopt ecocentric positions on the environment, moving away from anthropocentrism which has dominated education discourse (Kopnina, 2012a, Washington et al., 2017). Educators point to ecocentric thinkers such has Aldo Leopold and Arne Naess for inspiration for the ethical bedrock upon which to base environmental education suitable for a changing world (Jickling, 2003, Cocks and Simpson, 2015). It is pointed out that ecocentrism provides a unique position from which to view sustainability and that developing ethical narratives around care holds the possibility of invoking a wider lived experience within learners taking part in outdoor learning (Smith, 2002, Smith and Williams, 1999).

In addition, the field of behaviour change has provided a useful companion to pedagogical explorations of environmental educators, perplexed by the tensions and paradoxes which exist in the field. Previous conceptions of knowledge driven programmes have been seen to be too simplistic from a psychological behaviourist perspective. Instead, a wide variety of models have surfaced which have helped educators to understand the nuanced and complex ways in which behaviours are constructed and influenced (Stern et al., 1999, Hungerford and Volk, 1990, Barr et al., 2001, Shove, 2010). Prominent among these theories and important in terms of the tensions brought to the fore by sustainability education

and environmental ethics is social practice theory. From a social practices perspective, practices are influenced by individual agency and structural provision (Shove, 2010, Spaargaren, 2003). Importantly for environmental education, a practice led approach to understanding behaviour change enables a nuanced understanding of the operation of norms, values and attitudes as they develop as part of a learning community at residential centres. Within this context, environmental education is a practice which invokes ethical discourses and influences learners behaviour and environmental worldviews.

However, understanding environmental education through the lens of social practices places focus not only on pedagogy and educational practice, but also upon the role of the wider environment and the place in which learning takes place. Understood in these terms, learning locations and residential centres, including the norms conveyed within them become important considerations for environmental residential programmes. It is therefore important that this thesis has discussed the wider narratives and encounters of students taking part in outdoor learning programmes. It is these visceral and emotional encounters which comprise the final aspect of the conceptualisation of a relational approach to environmental education. Making use of relational ethics, including an ethic of care and ecocentrism, the other-than-human environment is placed as a key component in shaping the experiences of students taking part in residential programmes. For this reason, it is prescient to make use of post-structural and animistic approaches to understanding the responsiveness of other-than-human environments (Harvey, 2014, Clarke and Mcphie, 2016, Clarke and Mcphie, 2014), as well as practical approaches to invoking the other than human in educational practice, emerging from the field of ecopsychology (Buzzell and Chalquist, 2010, Clinebell, 2013, McGeeney, 2016).

In bringing together these areas of literature, a narrative structure has guided exploration of relational ontologies within residential outdoor environmental education programmes. Emerging from disciplines of psychology, pedagogy and philosophy, these strands of literature give rise to important theoretical structures which provide the means to both explore and interpret the experiences of students in these settings. From pedagogy, a pluralistic and relational approach to environmental education meets the instrumental historical foundations of environmental education in the UK, within which tensions are felt by educators

attempting to navigate uncertain futures. From a psychology, social practices offer an opportunity to identify a blended middle ground between these turbulent debates and offer instead a view of both agency and structure, informed by the context in which programmes take place. Finally, environmental ethics offer a relational position which observes 'lived experiences' within outdoor settings form an ecocentric perspective, articulated in terms of connectivity and conviviality in association within the other-than-human world.

## 8.2 Recapitulation of purpose and findings

Presenting four interlinked themes, emerging from qualitative enquiry and subsequent analytical work, this thesis has been driven by a core aim and four research objectives:

### 8.2.1  Aim

This research has focused on outdoor and environmental learning in a residential context with secondary school students in the UK. The research aimed to explore the extent to which current educational practices, structures and pedagogies in two case study locations can be said to occur as continuous lived experiences; invoking relational ontologies. Furthermore, this research has explored the environmental encounters of students and considered how these encounters shape and challenge environmental narratives. Beyond the described and explored encounters of students, this research looked too at the possibilities for outdoor environmental education to turn to relational ethics to understand the role of broader experiential encounters in shaping learning for sustainability.

The objectives of this research thus emerge from the tensions and debates which exist within environmental education and sustainability education, and offer a possibility of bringing historically divergent positions into conversation with one another. This 'blended position' presents itself as an opportunity to understand residential experiences beyond the transmissive/transformative divide and instead looks to the wider experiential basis which these places and experiences offer.

### 8.2.2 Objectives

1) To *describe* the environmental encounters of students in residential outdoor environmental settings.

2) To *consider* the ways in which these encounters might challenge environmental narratives and social norms.

3a) To *explore* the extent to which student experiences of residential outdoor environmental education can be said to invoke relational ontologies.

3b) To *suggest* ways in which residential outdoor environmental education might become more responsive toward relational ontologies.

The aim of the thesis speaks to a turbulent existing debate within education, and specifically within environmental and sustainability education between two distinct educational paradigms. These positions are variously known, but are termed in this thesis as *instrumental* and *emancipatory*. Their approaches to issues central to sustainability and environmental ethics are disparate – instrumentalism invites opportunities to know the right answer to environmental and social issues, while emancipatory learning creates opportunities for entertaining multiple answers, critical dialogue and pluralistic connotations of moral duty and ethics. Bringing this pre-existing debate into conversation with environmental ethics created openings for examining environmental education against this theoretical backdrop. In addition, the allied field of behaviour change provided an additional conceptual touchstone from which to understand the purpose and stated outcomes of sustainability and environmental education. A mediated view provided by social practice theory offered a lens through which to understand a middle ground between instrumental and emancipatory approaches to learning.

Set against an understanding of the outdoor and residential settings in which this work would take place, the conceptual context for the study opened opportunities for investigating nuances of student experience in the field. The two sites chosen – Slapton and Embercombe - were seen to be exemplars of instrumental and emancipatory approaches to residential outdoor environmental education, respectively.

Having spent 10 months in the field, moving between the research sites and working with 15 school groups intensively through the year, qualitative (largely ethnographic) fieldwork yielded large amounts of data emerging from participant observation, focus groups and interviews. Analysis making use of 5-staged coding, disassembling and resembling of data provided a structured approach to dealing with profuse descriptive data. From this detailed analysis, four major themes emerged which formed the backbone to the empirical discussion.

Empirically, this thesis has made use of primarily student led accounts, alongside teacher and research reflections to reveal the undercurrents and complexities of experiences of residential and outdoor learning. The four empirical chapters resonate with and speak to one another while also crafting a coherent narrative which accommodates the research objectives and underpinning theoretical contributions from the literature. In summary, each of the research objectives are returned to here and discussed in relation to the aim, objectives and literature. Figure 8.1 provides a visual reminder of how each objective connects with the four empirical themes.
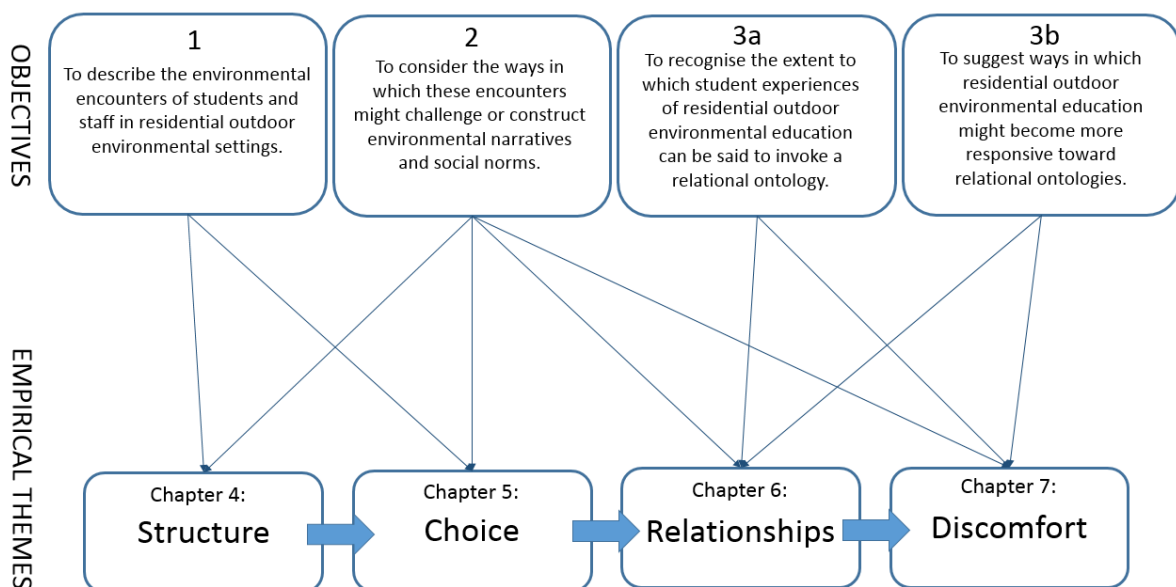


*Figure 8.1 Relationship between thesis objectives and the four empirical themes.*

Objective 1 was most clearly connected with the empirical themes of structure and choice, as these dealt mostly with the nature of the setting, routines and norms of residential learning. In the case of this objective, 'the environment' became widely associated with broader aspects of living, experience and the setting in which learning took place. Structurally, environments were both similar and different to student's prior experiences and expectations of residential learning. It became clear that considerations of 'normal' living and learning environments played a part in shaping the encounters of students in residential settings. While the two case locations operated from different pedagogical principles, there was seen to be a commonality amongst students at both locations that learning in a residential setting entailed new routines and norms, and that due to these new structures, a set of comparisons was often made between school and residential learning.

While at Slapton, environmental encounters were perceived to be "a bit too much like school" (Lizzy, chapter 4), they also provided opportunities to reflect on ways of being in the world, to the extent that they offered new ways of relating and working in these settings. The transmissive approach adopted by Slapton toward specifications and exams prevailed, yet within the broader encounters across both formal learning experiences and wider lived experiences, a set of new norms of living and learning were discussed. At Slapton these new norms emerged from a more exploratory approach to learning, linked to emancipatory and transformative pedagogy. Students reflected that their learning at school was largely didactic, while Slapton offered an opportunity to "start from scratch and do everything yourself" (Billy, chapter 4).

Embercombe also produced similar reactions to educational culture in schools when presented with new encounters and ways of being in new settings during residentials, yet these reactions were more pronounced than those at Slapton. For students at Embercombe, new environments and the norms of the residential setting conjured up discussion of oppression and marginalisation in the institution of school (Freire, 1970). Students discussed the ways in which they felt belittled and controlled and that Embercombe gave them an opportunity to explore and be free. Embercombe, by curating encounters which represented, at least

pedagogically, more transformative and emancipatory opportunities, provoked a critical examination of the school system in students. This was placed into further context by an accompanying teacher during one interview:

> *"… we go back and for a while [the students] are just gone. They're very much still here, if you see what I mean. It's very hard. We learnt that. That's why we come [to Embercombe] before the half term. It gives them a week before they reintegrate into school - because otherwise they just don't want to be there".*

(Teacher, Group D, Embercombe)

It is interesting from the point of view of environmental encounters that being placed into new situations and contexts with their own structural manifestations of norms and routines can create upheaval at 'home' so powerfully. Foran (2005) notes that outdoor education is 'intense', and indeed that word was used by students at Slapton and Embercombe when describing their experiences of residentials. In a sense, a form of dissonance was created in the encounters at residential centres through new sets of social and cultural norms (Cialdini and Trost, 1998).

While these encounters may be unusual and contextually different to what students are used to, connotations of 'home' environments were also thrown into question. The environmental encounters variously described as 'peaceful', 'relaxed', or 'free' might be linked to representations of home described by Busch (1999) as a place of nourishment, sanctuary and work. Going further, non-representational theory points out the continuousness of these encounters (Bennett et al., 2010). From this perspective, practices are seen to be concurrent with spaces of learning whereby the environment becomes an important actor in the conveyance of meaning to students encountering it (Kraftl, 2013). In describing environmental encounters of students taking part in residential environmental education, it is possible to understand representations of home – or an ideal of home -as being embodied by unfamiliar environments. Transformative learning theorists have advocated moments of discord or disruptive change, to produce possibilities for understanding situations differently (Mezirow, 1990a, Taylor and Cranton, 2012, Zembylas and McGlynn, 2012). So too, dissonance created by potential transformative encounters with new ways of

being and a different set of norms cast light upon normalised encounters of home and school. This was achieved through new moments in students lived and learning experiences sometimes sat at odds with their normal settings.

Taking a wider view of objective 1 considering the narrative of the thesis and the theoretical framework provided by chapter 2, several key observations can be made. Firstly, students recognised the different approaches to learning occurring at residential settings as opposed to school based learning. Observed from a pedagogical perspective, instrumental components of environmental encounters occur during curriculum focused and formal programme time – which is broadly recognisable to school based learning. This learning experience was distinct at Slapton to the wider lived experience as it occurred during 'free time', within which much of the 'soft skills' focus and emergent social and environmental interaction took place (Mason, 2018).

While environmental encounters at Slapton were constituted as new in terms of the learning experience, at Embercombe students encountered an encompassing lived experience pertaining to new environmental norms and routines. These observations demonstrate the usefulness of understanding a difference in experiences between lived and learning experiences – connecting with instrumental aspirations of learning which take place within wider intrinsic experiences of emancipatory learnings. In this way, it is possible to conceive the environmental encounters of students taking place within a broad set of lived experiences relating to the environment and setting, and emerging from an emancipatory conception of learning, while providing a context for instrumental learning to occur within the learning experiences necessitated by the goals of the residential (see fig. 8.2). By conceptualising student experiences within residential settings in this way, it becomes easier to understand constructions of narratives and norms in the language of social practices, whereby both instrumental and emancipatory drivers are at work in developing environmental understandings and relational experiences, akin to Wals et al. (2008) conception of a 'blended approach' to environmental education.
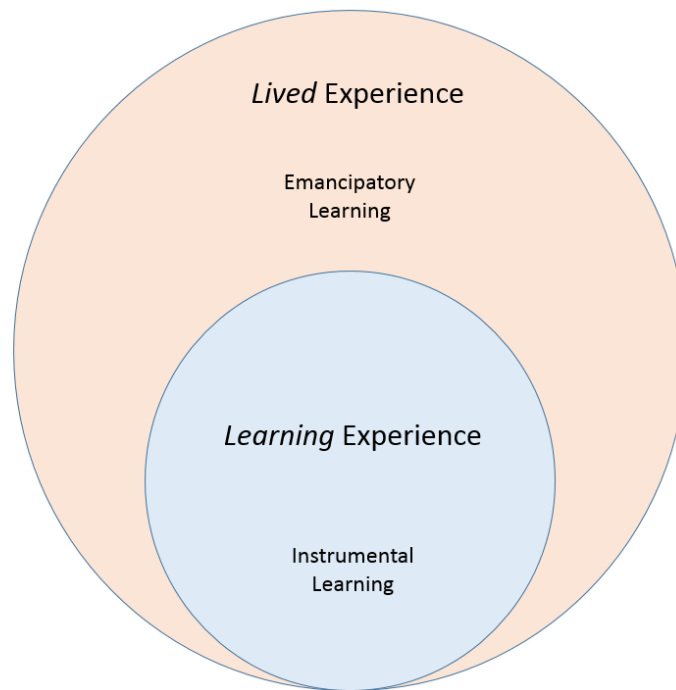
*Figure 8.2 Relationship between 'lived' and 'learning' experiences of residential education*

Furthermore, an exploration of objective 1 concerns itself with components of environmental ethics, as a wider comprehension of an encompassing 'lived experience', observed as instrumental and emancipatory aspects of the environmental encounters of students present themselves. While the ethical discourses present during the instrumental learning experiences are largely orchestrated by adults including residential centre staff and accompanying teachers, the emancipatory aspects of the residential which occur as lived experiences also contain their own sets of discourses. The environmental encounters therefore are shaped by a dialect occurring between these spaces of living and learning, whereby social and cultural norms as well as pedagogy interact with environmental ethical discourses.

While the encounters themselves were shaped by the dominant narratives of these spaces, the ways in which the encounters operated to disrupt and develop environmental narratives in line with sustainability education approaches, especially those approaches most allied with transformative education are explored in relation to objective 2 in the following section.

*Objective 2: To consider the ways in which these encounters might challenge or construct environmental narratives and social norms.*

In addressing objective 2, the discussion returns to aspects of lived and learning experiences in residential learning settings. By considering ways in which environmental encounters shape environmental narratives, the objective connects with discussions concerning relational ethics and the philosophy of education. Understanding the ways in which worldviews are shaped by encounters within environmental education programmes, including associated norms requires a consideration of behaviour change, while environmental ethics guides the relational component underpinning ecocentric approaches to sustainability. In addition, it is appropriate that space is given to consider the pedagogical mechanisms which operate within and work with behaviour change approaches to transform and shift worldviews. Therefore, transformative learning and deep approaches to sustainability education are also considered here.

Structurally, the lived and learning experiences of students presented themselves as a challenge to existing ways of knowing and being. Challenges were present in the living environment in the residential centres themselves, especially where the experiences constituted a challenge of 'living experience', however, the focus of encounters with the other than human environment – both ecological and material – provided interest in light of this objective. The challenging and construction of narratives pertaining to environmental understandings was evident in aspects of discomfort in coming close to other ecologies. Often these encounters proved to challenge environmental norms, yet they also provoked dissonant feelings. Reconciliation of these feelings was made more available to students through subsequent reflection and discussion. In addition, it appeared that the role of the 'non-teacher adult' was important in opening opportunities for discussion and reflection, and in challenging existing hegemony within the group. Finally, the social aspects of learning in new environments created a heightened intensity which provoked discomfort and challenge. While this intensity was without doubt difficult for some, it also opened opportunities to explore affective aspects of learning.

From a relational-ethical perspective, the environment was often seen to contain its own narrative which contributed to the pedagogical approach of outdoor

education. While students took part in prearranged activities and tasks as part of the programme, emergent and 'wild' elements beyond curriculum – informed and produced by the natural world itself. These aspects of student experiences in association with nature speak to notions of the 'otherness' of the natural world, given an authentic involvement in the "living presence of nature [and] multisensory participation in its otherness that involves feeling as much as cognition" (Bonnett, 2017 p.87). Here, Bonnett discusses the authentic aspects of education which connect us to the natural world, and in doing so invokes a form of understating of outdoor learning which runs deeper than the normally conceived ideal of learning 'in' nature and instead is suggestive of learning 'with' nature –sentiments which are found elsewhere, yet rarely invoked in environmental education which is largely concerned with instrumental ideals of teaching and education.

Participatory narratives, however, exist within the milieu of environmental education despite its instrumental bent. Objective 2 prompts consideration of the ways in which encounters shape environmental narratives. It is clear that dissonant, and 'disruptive' moment offer possibilities for transformation of narratives and worldviews, as articulated by students confronted with coastal change, creepy crawlies and new social encounters with members of their peer group and adults (Jickling, 2017). Jickling (2017) describes opportunities for transformative moments as ones which produce stories which compare beside our own and offer new ways of seeing the world – stories which "point to something already within us". This way of being and responding to the participation of nature is largely absent from contemporary education (Clarke and Mcphie, 2014). However, the testimonies of many of the students whose voices make up this research suggest that beyond the immediate concerns of environmental education these stories are being told. Although dominant learning narratives are shaped by an education which is taking place *within the natural world*, fundamental aspects of student experiences are shaped by sub-narratives emerging from an education in participation *with nature*. This deep approach to understanding environmental education creates opportunities to consider transformative potentials arising from the 'performance' of the natural world, especially considering environmental discomfort, disruption and dissonance

which is observed to take place when the participation of non-human nature is invoked (Jickling, 2017, Winks, 2017, Clinebell, 2013).

Furthermore, realisation of this subculture of environmental education, existing beyond the instrumental facade of contemporary approaches to learning create opportunities to reappraise the role of educators and pedagogy. A blended approach observed in conjunction with objective 1, bringing together lived and learning experiences, as well as emancipatory and instrumental learning approaches elaborate upon a suggestion of environmental education as potentially transformative when observed through the practices of which it is constituted. Relationally, this is a salient point, as practices of environmental education across lived and learning experiences concern themselves with narratives presented as disruptive and challenging to normative worldviews, and as such, offer a new way of knowing and learning with the world. It is the relational aspects emerging from the world to which the finds now turn, in appreciating those instances from the field which find resonance with objective 3.

### 8.2.2.3 *Objective 3a: To explore the extent to which student experiences of residential outdoor environmental education can be said to invoke relational ontologies.*

Relational ontologies were manifestly present in the nature of learning in the outdoors. This thesis focused on three scales of relationship – the self, the social group and the environment, finding significant ways in which residential learning constitutes a relational experience. Individually, as mentioned in the context of objective 2, outdoor learning experiences, not least those deemed uncomfortable and challenging, created openings in the norms and routines which students are used to, such as speaking out in front of one another and working with new people. Both settings existed as communities with associated social and place-based learning potentials, while the learning and lived experiences discussed in the context of objective 1 played a role in determining the extent to which this was made use of pedagogically.

As explored in chapter 6, environmental education has been associated with relationships since its conception. Early connotations of environmental education placed focus upon 'solidarity' and 'interdependence' (McKeown and Hopkins, 2003), while connection to the environment through approaches such as Earth Education (Van Matre, 1990) became a touchstone for environmental education

practice in the outdoors. The emotional and felt experiences of environmental education, as it exists in practice and separate to the overarching sustainability agenda, provide much in recognition of relational ontologies. However, it is necessary to recognise in light of objective 3a, that environmental education as it exists in the UK today is largely instrumental and places focus heavily upon ecological and scientific knowledge and understanding (Jickling and Sterling, 2017a, Bonnett, 2002).

Looking toward the promotion of residential experiences as ways of understanding the environment, 'learning away' is typified by suggestions that residential visits promote physical, mental and social wellbeing (Kendall and Rodger, 2015, Capaldi et al., 2015). Looking toward this objective, it is necessary to note that relationships normally extend to the social group and the promotion of individual wellbeing, in isolation from the environment in which learning takes place. Going further, some educators have called for ecological responsiveness to 'many relationships' (Priest, 1986), and suggest that the ecological components of place become part of the relational tapestry of student experiences (Smith and Williams, 1999). However, while such approaches may aim to provoke an emotional reaction in student, Kraftl (2013) suggests that the role of emotions in mediating individuals lived experiences are different to collective non-representational encounters which create "atmospheres or temporary sparks of connectedness, that are *shared*" (p.49, original emphasis). In making this important distinction, assertions that learning in residential settings is beneficial for the individual's wellbeing misses the broader relational significance of being in place and being affected by distributed stimuli from the other-than-human world, as well as within the social group. This relational point is in accordance with deeper conceptions of environmental education as a fundamentally ecological lived experience (Nicol, 2014, Smith and Williams, 1999) in which "things in nature participate in each other and thereby in place-making" (Bonnett, 2017 p.83). The participation noted here is also found in much of the ecotherapy literature, often termed 'performance', and speaks to the ways in which the natural world offers a dialectic and reciprocal relationship within learning (Buzzell and Chalquist, 2010, Clinebell, 2013). By bringing together these understandings with contemporary conceptions of environmental

education, new ground is broken for understanding the way in which residential programmes can be seen as relational.

In turning to these so-called 'atmospheres of connectedness', and looking to the non-human world for its participation in place making, a relational ontological undercurrent in outdoor environmental education is discussed in terms of discomfort in chapter 7. Occasional confrontation with 'other ecologies and rhythms of life' (Conradson, 2005) incited students to reflect upon their approaches to the natural world. Within chapter 7 this was exemplified using examples from the living non-human world (insects in Slapton Woods), as well as the material non-human world (broken sea defences after a storm in Start Bay). In each of these encounters the natural world can be seen, from a relational perspective, to have acted as part of the learning context in greater ways than simply a setting or backdrop to educational experience. The non-human world in these examples is argued to have 'performed' and participated in the lives of students (Clinebell, 2013). In such a reciprocal understanding of the role of the natural world, we are prompted to take notice of the multiple ways in which outdoor environmental education, by virtue of being 'outside' is made more responsive to  the world, and as such might take notice of what has been termed the 'mind-body-world intersection', whereby learning becomes an emotive as well as cognitive act (Buzzell and Chalquist, 2010).

The notion of emotions in acting to disrupt and challenge environmental narratives is concurrent with assertions that behaviour change entails more than simple cognitive aspects of learning and understanding –that a 'feeling' component is also important (Mayer and Frantz, 2004, Carmi et al., 2015). In provoking sometimes uncomfortable feelings in association with environmental narratives which are normally culturally and socially manifested, a transformative disruption is accorded upon learning in the outdoors. Making full use of these potentially transformative moments is not straightforward – and requires pedagogical approaches suitable for eliciting and working with discomfort. Chapter 7 explored the possibility of making use of a pedagogy of discomfort in outdoor environmental education (Boler, 1999, Boler, 2004).

Challenging social and cultural norms through education is not new, specifically regarding citizenship and social justice education (Zembylas and Chubbuck, 2009). It is interesting and necessary to note, however, that this thesis intersects

with these ideas, yet also builds upon them by grounding them in notions of environmental justice and ecological ethics. Boler (Boler, 1999, Boler, 2004) has asserted that educators should begin to make use of discomfort as a pedagogical device in order to challenge socially and culturally embedded injustices. This approach works with issues pertaining to social, racial and gender injustice, yet does not explicitly make reference to ecological and environmental forms of injustice. Clearly, opportunities are made use of in this thesis to expand this pedagogy into discomfort associated with environmental ethics.

Additionally, relational thresholds are reached through the exploration of this objective which are ontologically distinct to those which underpin contemporary environmental ethics – typified by anthropocentric environmental education programmes (Kopnina, 2012a, Washington et al., 2017). The notion of the development of relationships in residential settings is commonplace in the defence of the value of such forms of learning. Social relationships are seen to be sustained, as well as relationships with ecosystems and places (Priest, 1986, Kendall and Rodger, 2015, Woodhouse and Knapp, 2001). However, conceptualisations of environmental education as relational from a non-representation positon advocate a different approach to understanding the role of learning *with* the other-than-human world (Kraftl, 2013, Bonnett, 2017). This felt, as well as conceived domain of learning offers new ways of understanding the significance of outdoor learning for shaping environmental narratives in learners. As this thesis has argued, the animate and reciprocal ways in which the natural world 'performs' as part of an 'atmosphere of connectedness' invokes deeper and affective ways of understanding encounters with the other than human world as ecocentric and boundless (Rust, 2014), whereby other ecologies might be recognised to be "a bit like us" (Kim, Chapter 7).

Objective 3b speaks to the implications of understanding outdoor environmental education through the perspective of relational ontology. In objective 3a, the occurrence and suggestion of relational ontological thresholds within environmental education were explored. The purpose of this section is to suggest ways in which environmental education might become more responsive to these observations. In doing so, the objective places focus upon the empirical material and associated literature areas; exploring relational ethical discourse in accordance with educational paradigms, as well as the pursuit of transformative behaviour change toward sustainability.

A number of educators have prompted environmental education to become more responsive to the world; Selby (Selby et al., 2015) suggests that educators need to promote learner 'sensitivity' to the world, while Bonnett (2002) promotes sustainability education as 'a frame of mind'. Within these remarks is held the suggestion that education needs to change its perspective, especially with respect to relations with the other-than-human world. Nicol (2014) notes that outdoor educators are privileged in terms of becoming more responsive and developing sensitivity, as they already operate in the best place to start – the outdoors. From this perspective, becoming responsive to relational ontologies means moving beyond a causal set of relationships, and toward reciprocal relations and contribution toward place-making (Bonnett, 2017). So too, relational ontological encounters involve understanding environmental education beyond a 'knowledge and understanding' paradigm, and toward a 'performance and affect' paradigm. In considering objective 3b, the thesis makes suggestions arising from the literature in accordance with the empirical material of how this might be conceptualised, and in doing so, moves the research toward a relational understanding of outdoor environmental education in residential settings.

Residential outdoor environmental education is ideally situated to become more responsive to relational ontologies, by virtue of the fact that learning is taking place in a highly stimulating and complex set of environments populated by other ecologies, materials and forms of life (Conradson, 2005, Nicol, 2014). So too, these environments offer cross curricular and interrelated opportunities for

learning, and not least, pluralistic sets of understandings pertaining to environmental ethics and sustainability (Cocks and Simpson, 2015, Taylor, 1986). It was observed in chapter 7 that while students respond to the complexity, uncertainty and discomfort of being with other ecologies and rhythms of life, it is noted that these are occurring to a large extent in coincidental, unplanned and 'wild' moments within the programmes of environmental education. The spontaneity that accompanies the unexpected and the uncomfortable moments of outdoor learning are in part to their benefit, and enable a pluralistic and subjective interpretation of events as they unfold, and upon later reflection. However, it remains that there are ways in which residential outdoor environmental education might become more responsive to these facets of being in the world. Specifically, it is noted that the animate qualities of 'being in the world' are at play, whether invoked implicitly or explicitly as part of the taught programme (Bonnett, 2013, Nicol, 2014).

By understanding relational encounters with other ecologies and material aspects of the other-than-human world as 'wild', it is necessary to consider the place-making qualities of the environment itself. Objective 3 pushes concern for relational activities into the domain of non-representation and social practices, yet this also gives rise to considerations of the wider environment and the 'world's unfolding' (Abram, 2011). These emergent aspects of learning are provided by the setting, and are perhaps more conducive than the pedagogy deployed (Bonnett, 2017). Therefore, becoming receptive to the so-called performance of these ecologies, spaces and materialities and their enmeshment in co-producing place seems key when considering ways in which environmental outdoor education might become responsive to relational ontologies. The performance of the natural world, when considered from an ecotherapy positon enables a more applied consideration of how this might emerge in educational practice. In discussing 'an-earth connected self', not dissimilar to Deep Ecology approaches to 'Self-Realisation' (Naess, 1995), Rust (2009) comments on how simple connection with other-than-human spaces "can be a powerful ally in helping us recover a relationship with our own nature. In turn, it reminds us that the non-human world is full of living, breathing others, who are as much part of shaping our development as other humans are" (p.45). In making this comment, Rust (2009) recognises a veil of connection beyond which it is possible to slip – taking

with us a deeper regard for the non-human world which transcends contemporary relational encounters as typified by individual social interconnectedness (Bonnett, 2017). In 'recovering relationship' with the other-than-human, an invitation is made to nurture a reciprocal notion of relationship, toward a relational ethic for environmental education in line with animistic philosophy (Harvey, 2014). Animism has long been regarded as the domain of indigenous philosophy, but recent theorists are beginning to place this learning and set of perspectives into the territory of environmental education (Clarke and Mcphie, 2016, Clarke and Mcphie, 2014).

When considering the experiences of students learning in residential settings during this research, it is evident that relationships occur in a mix of settings, and the word is clearly taken to mean a variety of things. From a social interconnectedness standpoint, residential learning is rich in relational encounters stemming from time spent with one another, within new environments, and with oneself. While this is recognised from a personal-development positon within the evidence used to argue for outdoor and residential learning opportunities for young people, missing from this analysis is the sense that anything more can become of relationships – or that relationships can hold significance beyond the self, and beyond the human world. From this anthropocentric positions, it is clear that Selby's (2014) call for education to make use of a more rounded epistemology speaks to the narrow experiential base from which many environmental and sustainability education work operates from. Moving toward an ecocentric ethic for environmental education requires us to see these moments as intrinsically connected, and prompts educators to make use of wider experiences of relationships with the world – and to encourage a 'dissolving into boundlessness' whereby the ecological and material world is available to us in more than simply a backdrop to learning (Rust, 2014). Countering the strength of anthropocentrism in education, Washington et al. (2017) argues that ecocentric brings together intrinsic value with social justice issues, as well as ensuring a framework for working within the limitations of scientific certainty, at such an unpredictable time.

Much of what is considered to fall within the conception of relational encounters within this research occurs within the lived experiences of students. As previously noted in this section, instrumentally driven learning experiences offer little

opportunities themselves to provoke relational encounters, yet they provide vectors along which relational encounters emerge. It seems that relational ontological thresholds are reached 'in-between' instrumentalism, and within the blended space of transmissive and emancipatory learning. In responding to this objective, therefore, it becomes pertinent to ask how space can be created within the learning experiences of young people to provoke further relational encounters.

Furthermore, it is observed that the relational encounters operating within this blended space are process, rather than outcome based, and typify a subtext of deep sustainability education, as emancipatory in nature (Sterling, 2001). However, their elicitation came only later upon reflection. Identified by Kolb (1984) and subsequently made use of by others such as Moon (Moon, 2004, Moon, 1999), reflection is understood to be fundamental to 'closing the loop' of experience and learning. While utilised largely in informal learning settings, reflective practice is increasingly seeing uptake in formal school base and HE learning (e.g. Dummer et al., 2008).

As was the case with each of the three encounters detailed in chapter 7, material and ecological performance of the non-human world was subject to discussion and reflection by students. This often took place during the focus groups, which acted as a form for reflecting upon the experiences of the week. It can therefore be seen that focus groups became a form of sharing of experience which extended beyond the mere act of data collection. Discussing moments which were inherently uncomfortable for students can be seen to have become an 'enquiry of discomfort' (Wolgemuth and Donohue, 2006), with space provided through the methodologies deployed enabling further exploration of issues, and thus reaching new understandings regarding the relational connotations of experiences. The sharing of discomfort in this way is recognised from pedagogy of discomfort work with students focusing on social justice issues, as a way of becoming receptive of the complexity and difficulty of such situations (Boler, 2004, Zembylas, 2007).

The sometimes uncomfortable moments framed in chapter 7 provided examples of the ways in which otherwise mundane and everyday occurrences operating at the periphery of instrumental focus of much outdoor environmental education can be seen to offer 'disruptive transformative moments' in the experiences of

students. This is especially so when space for subsequent discussion and reflection is given. While Embercombe – representing a transformative approach to environmental education – offered reflection, the case at Slapton was that this occurred but less formally. Becoming more responsive to relational ontologies entails provision of space for emotional and subjective reflection on difficulty and dissonant narratives emerging from experience. It has been seen in both case settings that whether implicit to the design of the programme, or explicitly occurring on the fringe of instrumentalism, these moments occur. Attending to the 'mind-body-world intersection' requires a development of both educator and learner sensitivity to the world, and to the myriad possibilities for encounters beyond the expected. So too, moving beyond a personal-social ideal of development and wellbeing in environmental education entails a sense of self as an ecocentric relational being (Washington et al., 2017, Rust, 2014).

## 8.3 Research Contributions

This research has contributed to the fields of education and geography, and more specifically to environmental education, ethics, relationships and behaviours. The linkages and synergies between these allied fields have been explored in the context of previous research in chapter 2. Opportunities flagged prior to fieldwork have been applied to the empirical findings and this thesis now finds itself able to comment on the nature of these findings and the contributions this work makes to the joint disciplines of geography and education. This section links the narrative developed from literature presented in chapter 2 with empirical findings and analysis considered in light of the objectives of the research discussed in section 8.2.

### 8.3.1 A pedagogy of discomfort in environmental education

The intersection of environmental ethics and education, specifically transformative leaning theory recognises that learning outside of comfort zones holds essential implications for sustainability education. Mezirow (1997b) remarked; "we do not make transformative changes in the way we learn as long as what we learn fits comfortably in our existing frames of reference" (pp. 7). Moving outside of these frames of reference has been regarded as a challenge for many environmental educators pursuing a transformative approach to sustainability education (Jickling and Sterling, 2017b, Wals, 2010a, Cranton and Taylor, 2012b).

This research has uncovered various ways in which outdoor learning can be provocative, difficult and uncomfortable, with learners working in new situations, with new people and new environments. Focusing upon various forms of discomfort in outdoor learning, this research continues on from Boler (Boler, 1999, Boler, 2004) and her work on a 'pedagogy of discomfort'. Discomfort has previously been articulated as a pedagogical approach to be made use of in educating for social justice and relating to issues of exclusion and marginalisation, specifically race and gender, across disciplines such as health work and social care (Aultman, 2005, Coulter et al., 2013, Cutri and Whiting, 2015, Leibowitz et al., 2010, Nadan and Stark, 2016, Zembylas, 2010).

While a pedagogy of discomfort has been largely explored in a social justice context, this thesis has proposed that an application within environmental education is appropriate. Making use of a deliberative view of discomfort in environmental education connects environmental pedagogy with relational ethics, as new emotional frontiers are opened and discussed (Carmi et al., 2015, Zembylas and Chubbuck, 2009). Additionally, understanding the emergent, incidental and mundane moments of discomfort not as something to be avoided, but a potential 'disruptive transformative moments', such as those which shaped the ecocentric worldviews of Aldo Leopold and Arne Naess, advances understanding and practice of sustainability education (Jickling, 2017, Leopold, 1990). These visceral encounters with the other-than-human world, as well as the social discomfort often articulated by students taking part in residential programmes provide uncomfortable upheaval to 'frames of reference', and thus challenge social and cultural norms.

### 8.3.2 A shared atmosphere of place-making

Residential learning has recently been characterised as being beneficial to young people in many ways, from building self-esteem and confidence to improving academic attainment and physical fitness (Capaldi et al., 2015, Kendall and Rodger, 2015, England, 2016). Notable amongst the credible aspects of 'learning away' are the suggested benefits residentials bring to the social group and relationships (Kendall and Rodger, 2015). This view of learning is presented by this research as only part of the picture of student experiences in residential settings. Presented as a 'lived experience' in which place-making is enmeshed

with the material and ecological world as well as pedagogy and human experience, a different set of relations are uncovered.

From this enmeshed perspective, learning is felt as well as known, and notions of affect move the purely emotional components of learning into "atmospheres, or temporary sparks of connectedness that are *shared*" (Kraftl, 2013 p.49). These shared atmospheres of place making are more difficult to describe, let alone prescribe, as they are multiple and distributed. However, the view of environmental education in residential settings beyond the individual that takes part in 'many relationships' (Priest, 1986), toward a continuous notion of one distributed relationship with place and place-making (Bonnett, 2017) creates an important intervention within both theory and practice of environmental education.

While place-based education has sought a deeper and more significant connection with locale and community (Gruenewald and Smith, 2014, Smith, 2002, Sobel, 2004, Woodhouse and Knapp, 2001), the notion of 'a shared atmosphere of place-making' asks questions of the culture and social attitudes prevailing within that place, including the practices emerging from agency and structure – conversing with behaviourist models of practice (Spaargaren, 2003, Shove, 2010). These norms largely exist prior to groups visiting residential centres, and thus form part of the environmental interactions which take place there. So too, the ecological and material environment contribute and co-curate the production of place, and thus these aspects are also considered from the perspective of relational ethics and ecological education (Smith and Williams, 1999, Bonnett, 2002, Bonnett, 2017).

### 8.3.3 The performance of nature in environmental education

This research has presented a range of implications of relational perspectives pertaining to environmental education in residential settings; including social interactions within the group, relationships with adults, and interaction with the non-human-world. While this relational milieu emanates from a connective and continuous experience when considered as a 'shared atmosphere', this research makes a particular contribution to understanding the ways in which nature can be said to 'perform' within environmental education.

Pedagogically, the role of nature in environmental education has been explored in detail. The natural world is seen to offer multiple perspectives for learning

(Paisley et al., 2008, Richmond et al., 2017), metaphor for considering sustainability (RWL, 2014) and a forum for fieldwork (Amos and Reiss, 2012, GA, 2017). However, this set of observations is prone to seeing the 'environment' as a backdrop to learning experiences, and omits the notion that the environment itself intervenes in this learning. Making sense of this notion requires a return to ethical terrain populated by environmental educational discourse covered in discussion of a shared atmosphere of learning.

While Kraftl (2013) and Bonnett (2002, 2017) make arguments for a non-representational interaction with other-than-human environments within education, understanding the possibilities of this metaphysical notion in practice seems difficult. While pedagogy struggles with the application of the other-than-human into learning practices, examples are apparent from within psychology from which educators might borrow. Specifically, these examples emanate from ecopsychology and ecotherapy practices which merges environmental identity with consciousness and the ecological self, in the context of the setting (Jordan and Hinds, 2016), or what Buzzell and Chalquist (2010) term the 'mind-body-world' intersection. While ecotherapy contains its own theoretical tensions, making use of these behavioural models provides an indication of a coming-together of epistemological approaches to connection and becoming in the natural world, where affect meets social and cultural and place.

A fundamental and useful theoretical facet of the ecotherapy approach is to make use of the 'performance' of the natural world to elicit emotional and cognitive reactions from participants. Performance in the ecotherapy sense is invocative of animistic conceptions of the environment and enables a pluralistic and subjective sensory experience in nature to elicit new understandings and ways of seeing (Buzzell and Chalquist, 2010). From a performance point of view, the participation is seen to occur with the other-than-human world, not simply within it, and encourages affective, as well as cognitive understandings to emerge (Jordan and Hinds, 2016). In chapter 7, the performance of the other-than-human was seen to constitute both material and ecological aspects of the environment.

Environmental educators have argued for a more rounded epistemological basis for sustainability education, connecting the sensory and affective domains with those of understanding and knowledge(Selby and Kagawa, 2014, Judson, 2015), while others have argued for a deep ecological approach and have invited

educators to ally themselves with ecocentrism (Washington et al., 2017, Nicol, 2014). These assertions have been made in the face of an instrumentally driven education system which prioritises outcomes over processes and attainment over experience (Jickling and Sterling, 2017a, Sterling, 2001), subjugating the environment within Education for Sustainable Development (Kopnina, 2012a).

Looking to ecotherapy theory and practice, an opportunity is apparent for bringing together psychological and pedagogical approaches to the environment, and in doing so connecting ecocentric and relational forms of environmental ethics. Bringing our attention to the performance of the non-human world within education programmes enables a merging of epistemologies and an advancement approaches to educating *with*, not simply *within* the environment.

### 8.3.4 Blended learning paradigms

Historically, environmental education has been situated in a conflicted position regarding the purpose of education. Philosophically, this has been a conflict between rational and relativistic positions, while pedagogically it has been between emancipatory and instrumental philosophies (Curry, 2011, Sterling, 2001). This thesis has made the argument that more must be made of the subjective, relational and pluralistic understandings of environment and sustainability, and as such has aligned itself with some other contemporary voices calling for a change to the 'business as usual' model of education (Huckle and Wals, 2015, Jickling and Sterling, 2017b). Advancing this debate and overcoming the tensions which reside within contemporary environmental education and sustainability education has been a central proposition of this research. Bringing together the fields of behaviour change, ecological ethics and environmental education has elicited opportunities for perceiving this dualistic tension differently.

Although environmental education remains philosophically divided regarding pluralistic opportunities for sustainability (Kopnina, 2015), environmental ethics provides opportunities to perceive these tensions differently. Making use of relational positions which extend beyond the environmental movements usual consequential ethical framework enables a deeper and more sensitive approach to education which understanding learning sustainability as a frame of mind (Nicol, 2014, Bonnett, 2013). Relational ethics within environmental education have been explored elsewhere (Smith and Williams, 1999, Kronlid and Öhman,

2013), yet their development within both instrumental and emancipatory pedagogical settings, as well as within residential 'lived experiences' is new (Nicol, 2014). Residential programmes offer a unique perspective on the ways in which environmental education becomes a lived as well as a learning experience, transcending instrumental spaces and settings, and moving into free and emancipatory settings.

By viewing the continuous experience of residential learning, opportunities arise to conceive of blended spaces of learning in which practices emerge as a result of both instrumental and emancipatory principles of education, across both learning and lived experiences. Key to placing this into context is a behaviour change approach to social practices, expanded upon by Wals (2010b), with regard to blended spaces of learning in education. From a blended practice perspective in residential settings, and making use of pluralistic and ecocentric environmental philosophies, it is possible to bring together instrumental 'structure', with the 'agency' of emancipatory learning. Transformative approaches to education are therefore enabled in a blended space. In the case of Slapton, where the dominant educational paradigm was instrumentalism, a blended perspective enables a bringing in of student voices, and a development of sensitivity to the emergent aspects of learning, the performance of the natural world and cultural and social norms within the group. At Embercombe, where the dominant educational paradigm was emancipatory and transformative learning, blended spaces offer opportunities to explore the structural conditions of the locations, society, the social manifestation of norms and the relationship between the residential setting and school or home.

A blended approach enables a pluralistic and pragmatic position to surface within environmental education, to be explored through the everyday practices of learners and educators. Making use of social practice theory to advance the behaviour change aspirations of sustainability education, whilst also making space for the emergent and wild counterparts which are seen to be important for transformative learning creates new opportunities for exploring the ways in which sustainability education is taken up across residential outdoor environmental education settings. While learners clearly come to these settings with their own identities, cultural and social norms, they meet the structure of the learning setting which manifests its own routines and educational approaches. Navigating this

complex space is essential to making use of the fully relational possibilities of learning away.

## 8.4 Limitations and problems arising during research

This study raises several propositions and suggestions regarding the nature of learning in the outdoors and in residential settings. However, before continuing to explore the implications, recommendations and contributions to the field and educational practice, it is necessary to first consider the limitations and problems which arose during this research. These include; differences of fieldwork approach in each location; issues of neutrality and positionality, the purpose of the focus group, issues surrounding the use of photos and concerns regarding the analytic process and use of data. This section refers to the research experience in the first person to more clearly articulate some of the problems which arose.

Firstly, initial time spent in the case locations quickly revealed that expectations of myself as a researcher during fieldwork were different in each. At Slapton it seemed clear that I was expected to be a 'passive' observer of the programme of fieldwork – taking notes in the background and occasionally speaking to students. In the field, this was to some extent challenged as I was asked more often to become involved and to help with equipment and guiding students on tasks. However, during classroom sessions, I was situated at the back of the room with a notepad and pen. While this might fit the ethnographic stereotype, this approach was contrasted by the expectations which programme staff at Embercombe had for me. From the beginning at Embercombe, I was fully involved in helping with group activities and supporting facilitators. I was encouraged to take more active roles, and conversely to Slapton, I had to be assertive when it came to writing notes, making time after lunch and during the evenings for this purpose. As the year passed, my involvement at Embercombe increased, as I was quickly seen as someone with experience who was an asset to the running of the programmes. Perhaps less a limitation and more of an observation – the challenge at Embercombe was to step away from participation at times, while at Slapton it was to assert my desire to participate and not simply observe.

Related to the point above, my position regarding so-called 'neutrality' was unclear from the start. Positionality has been discussed in both chapters 1 and 3, but it is necessary to return to this here briefly. My previous role at Slapton as a

member of the education team meant that I could not approach the setting objectively – regardless of the methodology and epistemology employed by this research. While I made use of an interpretive and subjective stance in pursuit of this work, I found that my positionality altered my gaze critically in the setting, more than I was permitted by my previous experience to do at Embercombe. Educationally, I noted that the approach at Embercombe appeared 'fresh' and 'novel', while the approach at Slapton was familiar and understood pedagogically. Later in the research this became a useful frame from which to understand the empirical data, yet early on I was perturbed and challenged by my own consciousness regarding the culture and philosophy of the settings I found myself in.

Secondly, Slapton presented an additional difference which later became a methodological challenge. While at Embercombe, the noted 'lived experience' – i.e. the time the students spent in between 'formal learning tasks' - was open and participated in by adults, and indeed, the line between learnt and lived experience was very much blurred at Embercombe, at Slapton the 'free time' spent when not in formal learning settings such as fieldwork or in the classroom was not able to be accessed by myself. These times were perceived as private and off limits to staff at the field centre. As with the above points regarding educational philosophy, access and positionality, while on one level a limitation to fieldwork, this observation also provides interesting empirical insights into the culture of life in these settings.

The remaining limitations focus more specifically on methodology and analysis, yet also partly arise from this observed difference in residential centre culture. In particular, focus groups operated differently in each location. At Slapton, the focus groups typically took place on the final evening of the course, and made use of photo elicitation as per the methodology. I would normally be the only adult in the room, and would be free to approach the focus group as a clear aspect of my research. At Embercombe, however, it became clear that the programme staff held their own agenda for these discussions, and I would frequently be joined by an experienced member of the education team who would normally attempt to guide discussions. I worked with this person to find a mutual middle ground where both of our agendas would benefit whilst also making it interesting for the students, but it wasn't until I later came to transcribe the data, that it became

apparent that a conflict of agendas was operating. Despite this, the crux of the discussion always focused on learner experiences and was fruitful nonetheless.

Related to the above point, Embercombe was also a difficult location to make use of photo elicitation. Students were never encouraged to take photos, and at times – for example during the skinning of the deer, they were actively encouraged not to. This made working with photo elicitation difficult at Embercombe, and thus it was jettisoned in this setting as a method. However, the depth to which students engaged with discussion didn't seem to be damaged by a lack of photos, rather a parity was observed between the engagement of students during focus group discussions in both settings.

## 8.5 Implications and Recommendations

Orientating this chapter toward the implications and significance of the thesis for educational practice, a number of points can be made. In making these points, practicable opportunities are made available. The wider context and understanding stemming from the body of discussion and synthesis found in this chapter are no doubt of use to practitioners in and of themselves, however, a focused selection of implications are presented here:

### 8.5.1 Working on the thresholds of uncertainty and discomfort

As has been discussed, the spaces and places of outdoor education and residential programmes constitute structures, routines and norms which contrast and challenge those which learners associate with home and school. In addition, the outdoor environment holds within it opportunities to meet aspects of the world which seem unusual and different, and occasionally difficult and uncomfortable. The inevitability of these observations is such that they need not always be designed into programmes and sessions, rather that they arise spontaneously as part of the lived experience of being in the setting.

The opportunity for educators here is to become aware of the potential held within occasions which confront and challenge, and to work with learners to understand the feelings that these moments conjure up. Challenges felt as a part of changed routines and structures constitute an aspect of *lived* experience which is complementary to the *learnt* experience. Educators might begin to see the learnt and lived experience in outdoor and residential settings as emergent of one

another, and thus to see a continuity between the formal and informal aspects of learning – complete with challenge, uncertainty and discomfort.

### 8.5.2   Making use of brave spaces for learning about the world

Working with discomfort in learning occurs either explicitly as proposed through a pedagogy of discomfort, or implicitly as spontaneous elements of learning and living in residential outdoor settings. Boler's (1999) pedagogy of discomfort goes so far in suggesting that tackling social justice issues requires upsetting worldviews, and this thesis has suggested in 8.4.1 that environmental justice education might benefit from a similar approach, and has demonstrated using examples how this occurs in the field both implicitly and explicitly. However, the application of discomfort as pedagogy is not clear, not least from an ethical standpoint. Placing learners to uncomfortable scenarios and presenting challenge demands new pedagogical approaches.

The moral dimensions of making use of discomfort in education have been noted, and as such caution is advocated though use of pedagogies which deeply challenge learners (Zembylas, 2015). As such, this thesis has also crossed paths with recent work on spaces of challenge – not least that which discuss 'brave' and 'dangerous' spaces (Arao and Clemens, 2013, Cook-Sather, 2016). Making use of a pedagogical approach which challenges discomforts and upsets necessarily moves away from the traditional mantra of 'safe' spaces.

The work on brave and dangerous spaces opens an opportunity to bring discomfort into environmental education in an agreed and ethically palatable manner. The suggestion is to begin with a group agreement to work with uncertainty and to embrace challenge in a way that discomfort as experienced through new social and cultural norms as well as in association with the other-than-human environments in which learning takes place, become opportunities for seeing the world differently.

Building brave spaces and discussion of challenge, uncertainty and discomfort into the teaching and learning at residential field centres heightens the expectation that learning will entail something different, and provides an invitation to challenge oneself. However, simply being open to new ways of seeing the world does not go far enough on its own. To provide opportunities for discomfort

and challenge to become transformative moments in outdoor learning, space and time for reflection must be built into the programme.

### 8.5.3 Making space for reflection

As commented on earlier, reflection has long been seen to be important in the well-established pathway to experiential learning. Reflection offers a space for learners to sort and make sense of the experiences of the activity/day/programme and presents itself as both structured and unstructured occasions, both individually and as part of a group.

Exact approaches and reflective exercises are not commented on here, and have been extensively covered elsewhere (e.g. Young et al., 2010, Dummer et al., 2008, Alterio and McDrury, 2003, Boud et al., 1985, Moon, 1999). However, it is suggested that building reflective activity and discussion into the running of outdoor and environmental education programmes should be prioritised considering previous recommendations regarding discomfort and brave spaces. As understood in the terms portrayed by this research, student's encounters with uncertainty, complexity and discomfort in outdoor learning was given clarity by later reflection in the context of focus groups. Initial reactions often subsided into wider-than-self appreciation and challenge to the previously regarded environmental worldviews of students.

Reflection, therefore, might be offered in terms of time and space to make sense and discuss the affective and visceral aspects of learning in the environment – beyond the instrumental desires of the programme, and within both the lived and learning experiences of students. In addition, reflection offers a space to consider the role of the wider environment, and the non-human nature which helps to curate these experiences.

### 8.5.4 Learning with, not just within nature

The final implication of this research concerns the role of non-human nature in shaping the learning experiences of students. Philosophically, it has been established by this thesis that residential outdoor and environmental education programmes invoke relational ontologies, by entering the space of 'other ecologies and rhythms of life' (Conradson, 2005). Going further, it might be suggested that these relational ontological aspects of this type of learning are circumstantial and emergent qualities. If this is the case, it should be asked, what

more can be done to invoke relational ontologies and ways of being in the world, considering their ethical contribution to sustainability and environmental behaviours.

A suggestion is made here to situate learning in the outdoors not simply 'within' nature, but 'with' nature. Similar to the deep and ecocentric thinkers of the 20th century such as Naees and Leopold (Naess, 1995, Leopold, 1949), this way of being in the world promotes the understanding of the performance of the natural world in shaping our understandings and relationships with it. By learning with nature, we move away from an instrumental view of the natural world and toward an intrinsic sense of its worth. Learning with nature thus helps to bridge the philosophical and practical divide of emancipatory and instrumental approaches to learning, offering a blended alternative and an opportunity to infuse traditional forms of outdoor learning such as fieldwork with deeper connotations without forfeiting the instrumental necessity of such programs, and creates possibilities for 'disruptive transformative moments' to occur in environmental education (Jickling, 2017).

## 8.6 Autobiographical reflection

Finally, it is necessary to reflect briefly upon the research journey from a personal perspective. While much of what has been presented in this thesis is necessarily grounded in the language of discipline focused research, it is inescapable that this work has also spurred personal reactions and involved deep emotional encounters which have been largely overlooked by the write up of the empirical findings. The research journey lasted three and a half years and has taken me on an exploration of educational practice, fieldwork approaches and personal encounters rooted in the social as well as environmental domains of the field locations.

The three and a half years of discussions, reading, writing and more corporeal engagements with place, people and nature have rewarded and enriched, beyond expectation. The research journey has enabled exploration of themes, issues and considerations relating to our connection with the natural world which have long been close to my heart and concerns. Committing such a stretch of time to feeling the currents and flows of these waters have left me nourished. Yet, at the same time, I feel that such considerations are embryonic. However much we look to our ancestral pasts for inspiration, and to the philosophies of

ecocentrists, animists and other deep green paradigms for pathways to connect with others we share the world with, it seems that only new narratives will serve education in these most different of times.

As the Holocene gives way to the Anthropocene, and the world tumbles and turns into the cosmos, its surface alive with hopes, fears and the energy of interconnected life, we seem to stand at a crossroads faced with uncertainty and choice – into an uncharted future (Magrini, 2018). Yet, perhaps it is not where we choose to go but the heartfelt cares, concerns, loves and wishes that we carry with us on this journey that truly matter. Like a child staring at the night sky, longing for the freedom of the stars, but feeling the comfort of her feet firmly on the ground, we embody paradox. Our connection with the world is only as rich as the stories we tell about it - perhaps, even, the stories that we choose to listen to. The world is alive with voices other than our own.

In some small way, I hope that this research has helped to uncover a set of differentiated narratives spun from the yarn of experiences set in their own time and place, and woven from expectation. The threads of connection with the world appear in the testimonies of participants in this research as aspects of the relational self – seen through the gaze of lived experience, social and cultural norms and pedagogical assertiveness. As the child reaches for the stars, and her feet tingle at the sensation of being caught upside down, headfirst into the inky sky, speckled with other worlds – connection comes to us from the unseen corners of our experiences in the world; *with* the world.

In the very least, this work has brought me closer to the rhythms of life and other ecological voices which spoke to me as a child and once compelled me to bring my attention to environmental education and sustainability-related issues as an adult. While I hope that this work helps to inform, inspire and challenge others, I commit these pages to record with the awareness that my own educational practice, geographical understandings and compassion for life have been enlivened.

*Appendix 1: Example of research permission letter to case locations*

Embercombe
Higher Ashton
Exeter
Devon
EX6 7QQ

University of Exeter
Streatham Campus
Amory Building
Room 360
Exeter EX4 4QJ

21st January 2016

Dear █,

I am writing to you to ask for your permission to carry out educational research at Embercombe this spring and summer (specific dates to be agreed) with visiting groups. I will be collecting information relating to participant experiences of outdoor and environmental learning and will be using observational, interview and focus group based methods (Please see the research proposal below). I will contact the proposed groups pending your approval and seek their permission for involvement.

If you are happy for this work to go ahead I would be most grateful if you could sign and return this page to me.

Kind regards,

Lewis Winks

PhD Researcher
University of Exeter

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**Participant Organisation:**
*Embercombe, South Devon*

**Participant Signature** (consent for location to be used for research):

………………………………………………………………….

**Print name:**

………………………………………………………………

████████████████████
████████████
██████████
██████

University of Exeter
Streatham Campus
Amory Building
Room 360
Exeter EX4 4QJ

21st January 2016

Dear ████,

I am writing to you to ask for your permission to carry out educational research with █████ ████████████ students visiting Embercombe ███████████████████████████. I will be collecting information relating to participant experiences of outdoor and environmental learning and will be using observational, interview and focus group based methods (Please see the research proposal below). Following your consent I will seek the consent of individual students to be a part of this research on arrival at Embercombe on ██████████. Their involvement will adhere to high ethical standards as outlined at the end of the research proposal included.

If you are happy for this work to go ahead I would be most grateful if you could sign and return this page to me.

Kind regards,

Lewis Winks

PhD Researcher
University of Exeter

---

**Participant Organisation:**
*Embercombe, South Devon*

**Participant Signature** (consent for location to be used for research):

……………………………………………………………….

**Print name:**

……………………………………………………………..

Appendix 3: Research proposal as sent to case locations and participating groups

Research Proposal:

Understanding how field-based learning contributes to socio-environmental practices of care.

The purpose of this research is to understand how field based (outdoor) learning experiences are informed by an ethic of care and how these experiences might translate into care-based socio-environmental discourses and practices. The research makes use of case studies of outdoor learning at specific sites to explore this aim in depth. Predominantly the work will focus upon two site-based cases; that of Embercombe – a land based learning charity South of Exeter, South Devon, and that of Slapton Ley, a field studies centre within the Field Studies Council's network, also in South Devon. This work will contribute toward a PhD study to complete at the end of 2017.

Methods:

The methods to be made use of in this research will include participant observation, small focus groups and the use of photo elicitation, which will entail participants being asked to take photos of significant moments of the residential experience in response to questions and speaking about their photo within the focus group. The role of the researcher (myself) will be to become as integrated into the learning setting as possible, and where necessary to take an active role in activities and experiences of students and staff.

Research Ethics:

**Photos – permission to use**

Where photos of participants are used during research, participants (and guardians) will be asked for their permission to be in photos and will be made aware of the potential use of photos in the research.

**Anonymity of research findings**

Participants will be made aware that their names will not be used, nor unnecessary personal references within the research findings

**Storage of data**

No data will be kept on public servers, nor will unnecessary copies be made. Data will not be distributed without anonymising participant responses.

**Ability to abstain from research participation or omit questions**

Participants will be told that they may abstain from research or remove themselves at any time without warning, and that they may skip questions on surveys or during focus groups.

**Discomfort of being questioned on personal experience**

Participants will be told that they will be questioned on their experience of field based learning and that they reserve the right to not answer uncomfortable questions, and to remove themselves from the research at any time. Furthermore, participants will be made aware that research findings will be anonymised and names will be kept confidential where given.

**Presence of researcher and conscience of observation**

Researcher presence and issues relating to researcher-participant relations will be reduced where possible, by minimal and subtle use of note taking (writing up in full following observation).

**Recording of focus groups**

Where recording equipment is used, students will be made aware that this will be kept confidential at all times and that names will be anonymised in transcribed data.

**Deliberate observation of teaching approaches and learning – destination of research**

Both students and staff (all participants) will be fully briefed on the nature of the research and its purpose prior to it taking place.

**Living amongst the researched community for a short period of time**

Care will be taken to ensure professional practice during fieldwork, and where social activities constitute aspects of lived experience, the researcher will ensure not to breach the trusts and not to deliberately mislead participants.

## Questions you may have

### What will you write about me?

I will not use your name in my work and nobody will be able to recognise you from anything I write. I will ensure that I do not make reference anything which might let you be identified from my work.

### What will you do with photographs?

If you agree to be in photographs I will use these to aid my memory of the trip, and I will make use of some of the photos in my work. If you do not wish to be identified in photographs please let me know and I will make sure that you cannot be recognised.

### Who is organising the research?

My work is supported by the University of Exeter and the Field Studies Council who run residential learning centres in the UK. It is funded in part by a conservation organisation called the Whitley Wildlife and Conservation Trust.

## Contact details

You can get in touch at any time with your questions or concerns:

### Email:

LW425@exeter.ac.uk

### Phone:

01392 722257 (university line)

### Address:

Lewis Winks
Geography PGR, Room 360
Amory Building
University of Exeter
Streatham Campus
Northcote House
Exeter EX4 4QJ

http://geography.exeter.ac.uk/

https://www.field-studies-council.org/



## Learning to Care:

*Investigating the role of outdoor learning in shaping environmental behaviour.*

Lewis Winks,
PhD Researcher,
University of Exeter

UNIVERSITY OF
EXETER

## The research

My name is Lewis Winks, and I am a researcher at the University of Exeter. I am interested in learning which happens outside.

My research is particularly concerned with the way in which people experience the outdoors and the type of learning which occurs as part of outdoor education visits.

I would very much like to involve you in this work. As a young person who is about to take part in such an experience I would like to seek your permission to join you as a 'participant observer'. This means that I will be with your group and will take part in the activities that you take part in. I will be making notes and taking photographs but will not focus on any one individual as I am mostly interested in the experiences of the group as a whole.

## Discussion groups

I would like to invite you to take part in a small discussion group as part of this research. I will be asking for 4-6 volunteers to take part in a relaxed discussion which will last for no more than 45 minutes and will take place toward the end of your stay.

In preparation for this, I will be asking these volunteers to take some photos of their experiences during the trip which they will be asked to talk about during the discussion. These discussions will be recorded with your permission.

If you are interested in taking part in this, please speak to either myself or your teacher / group leader.



### Do I have to take part in discussion groups?

No, I will be asking for volunteers to take part in discussion groups. You might like to take part but this is entirely up to you. The discussion groups will be recorded, and I will need your agreement to do this.

### What if I don't want to be part of this research?

If you decide you don't wish to be involved with this research that is absolutely fine. Please tell myself, your teacher or the group leader and we will make sure that you are not involved in the study.

### Can I decide later that I don't want to be involved?

If you decide later that you don't want to be included in the research, that's fine. Please let me know by sending me an email, or alternatively let your teacher know and they can pass the message on.

*Appendix 5: Statement to participants at beginning of residential visit*

**Statement to participants at the beginning of residential visit**

Dear participant,

My name is Lewis and I am a researcher from the University of Exeter.

I would like to ask for your permission to carry out educational research during your stay here. I will be collecting information relating to your experiences of learning outdoors. I am interested in the ways in which outdoor learning and time away from home can bring us closer to nature and help to encourage environmentally friendly behaviours and ways of thinking.

I will be joining you for the duration of your field trip / visit and taking part in activities with you. I might ask some of you to take part in an informal discussion which will be recorded. I may also ask a small number of you to take photos during your stay which I will ask you to talk to me about in small and informal groups.

I want to be very respectful of your privacy and comfort. I'd like to take photos and make some notes during the trip. If you feel unhappy about this please feel free to talk to me or your teacher. I will make sure that I do not use your names in my writing and that you can't be recognised in photos which I use in my research.

If you decide that you do not wish to participate in this at any time, please speak to either myself or your teacher.

Thank you for your time.

Lewis Winks

PhD Researcher
University of Exeter

**Statement and agreement for participants taking part in focus group discussions and interviews.**

STATEMENT:

Dear participants,

Many thanks for agreeing to take part in this research. I am a researcher at the University of Exeter and am interested in the experiences of people on residential field trips such as the one you are currently on. You will already be aware of this, but as you have agreed to take part in a small discussion group, there are some other points I should make you aware of.

I will be asking you to take some photos during your time here. I will give out some cameras for this purpose. On [INSERT AGREED TIME] I will ask you to select one photo with which to represent your time on this field trip. We will meet and discuss the photos together [INSERT AGREED TIME].

I would like to ask for your permission to record our conversations during this meeting, and also to use in my research the photos that you take. I will make sure that nobody's name is used in my writing and that faces in photos are not recognisable. I will ensure that the recordings of our conversations are kept safe and will not be heard by anyone except for me.

Finally, you have the right to withdraw your permission to use your information and for you to be in this research at any time.

Thank you for your time.

Lewis Winks

PhD Researcher
University of Exeter

AGREEMENT:

I agree to being recorded as part of a discussion group, and to photos taken by me being used for research purposes. I reserve the right to withdraw this permission at any time.

**PRINT NAME**                                              **SIGNATURE**

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