



UNIVERSITY OF
LIVERPOOL

The Interdisciplinary
Perspectives, Practices and
Principles of Forest School

FOREST SCHOOL
RESEARCH SYMPOSIUM



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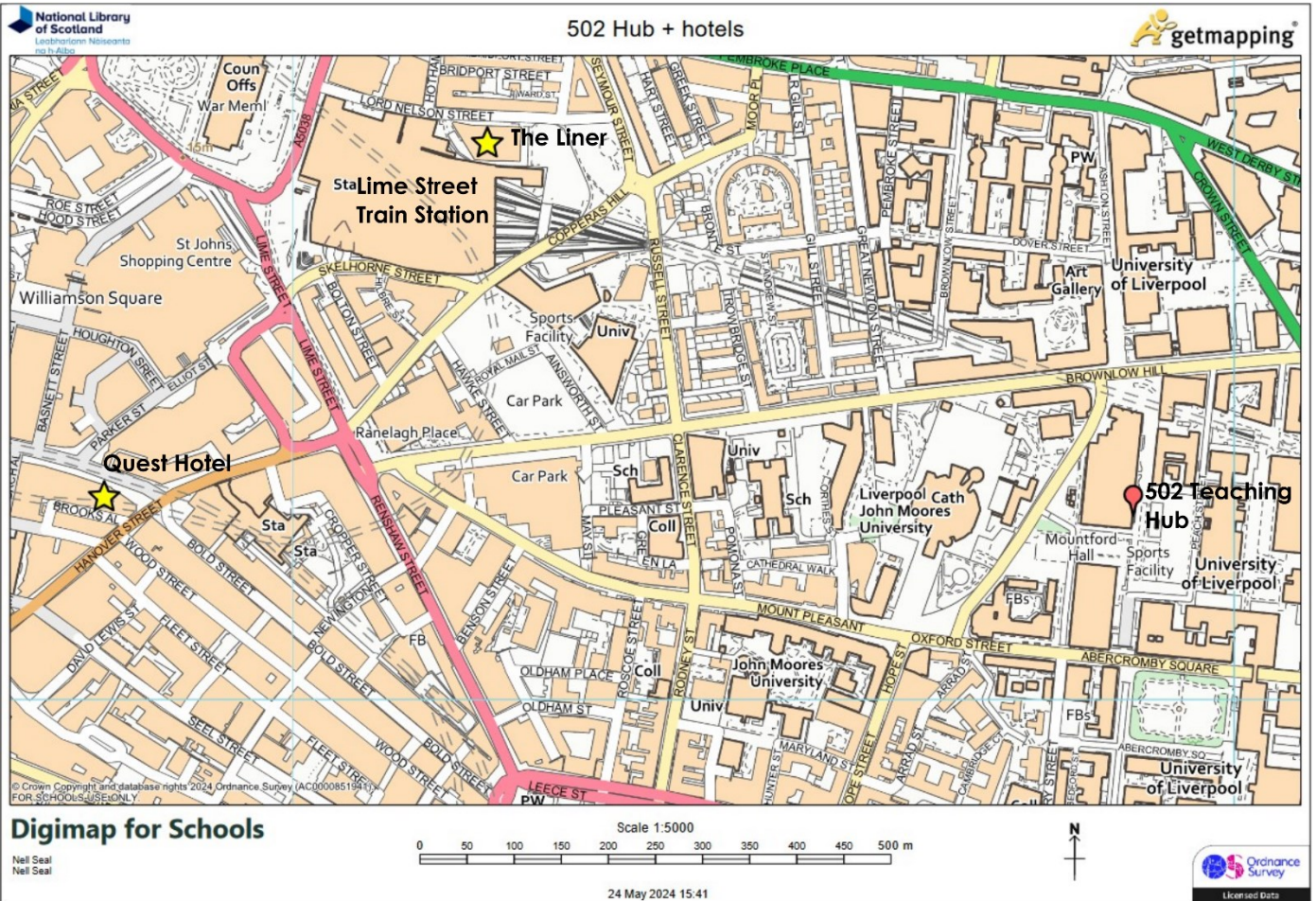




Traveling to the Symposium at the HUB 502 at University of Liverpool

**Venue Address: 1st Floor, Bedford House, Knowledge Quarter
University of Liverpool Conferences & Events, University of,
Liverpool L69 7ZP**

What three words: [///flight.transit.middle](http://flight.transit.middle)



Finding the Teaching Hub 502

The nearest intercity station to the Teaching HUB 502 is Liverpool Lime Street. The venue is a steady 15 minute walk up a steep hill Brownlow Hill and resides near to the Metropolitan Cathedral pictured overleaf.



Airports

Two main international airports serve Liverpool – Liverpool John Lennon and Manchester Airports

Liverpool John Lennon Airport

Finding your way from the airport to the city centre (Lime Street Station) by public transport is relatively easy.

You will need to take a bus from the airport to Liverpool South Parkway which is the closest rail station to Liverpool John Lennon Airport and is located just 3 miles from the airport itself. The Bus Services that take you to and from the Liverpool John Lennon airport to Liverpool South Parkway are numbers 500 (express), 80A and 86A. For bus timetables click [here](#).

Once at Liverpool South Parkway you will need to take a train to Liverpool Lime Street or Liverpool Central Station. These Two stations are the closest to the 502 Hub, our venue for the Symposium. Please check their proximity to hotels and other city services.

Bus Transport

You can plan your travel around the city using the Merseytravel route planner <https://www.merseytravel.gov.uk/bus/>

Manchester Airport

If you are flying into Manchester Airport, the good news is that there is a direct train to Liverpool Lime Street from the airport. There are approximately 25 trains per day on this route. The journey takes around 80 minutes and there are no changes of train required. Intercity trains arrive at Liverpool Lime Street which is relatively close to the venue.

Taxi

0151 708 7080 - Britannia Taxis

0151 722 8888 - Alpha Taxis

0151 928 3535 – One call Taxis

Uber also functions around the area.

Travelling by Car

Parking in Liverpool can be a bit hit and miss and city centre parking can be expensive.

For on campus Car Parking please go to <https://www.liverpool.ac.uk/maps/visiting/car-parking/>

For those delegates who have access or mobility needs <https://www.liverpool.ac.uk/maps/visiting/disabled-visitors/>



Welcome to the World's First International Forest School Symposium



UNIVERSITY OF
LIVERPOOL

The Forest School Association (FSA) and the University of Liverpool are delighted to welcome you to the world's first International Research Symposium on Forest School.

We are excited to be offering this unique opportunity to become part of a dynamic and burgeoning academic community dedicated to Forest School. This symposium provides a platform for presenting your research and delving into existing and forthcoming research papers across various disciplines that underpin the ethos, pedagogy, and practice of Forest School.

As an innovative educational approach, Forest School holds immense potential for transformative change both at the individual and societal levels. Over the years, the Forest School Association has tirelessly advocated for Forest School, promoting its ethos and six core principles. This advocacy has gained momentum with the rise of research and theoretical contributions to the field. However, it is evident that research and statistical evidence are crucial for this advocacy to be acknowledged and acted upon.

At this event we hope:

- To establish 'Forest School' as a distinct area for research (with a common understanding of the 6 principles that underpin the Forest School ethos).
- To bring together an international community of researchers with interests that are relevant to Forest School.
- To offer a platform to share research.
- To identify opportunities for cross-discipline collaboration.
- To identify gaps in research areas.
- To develop opportunities for Forest School practitioner research.
- To identify resources, including funding, for Forest School research.
- To be an inception point for future Forest School research coordination and dissemination of findings.

During this symposium, we will explore research and papers that enhance our understanding of Forest School. You will have the chance to engage with new research, participate in discussions about future directions in Forest School research, and identify gaps and synergies within the field.

We look forward to your contributions and to fostering rich discussions that will shape the future of Forest School research.

Warm regards,

Gareth Wyn-Davies - FSA CEO

The Forest School Association and The University of Liverpool

Event Program

Wednesday 26 th June		Thursday 27 th June		Friday 28 th June	
		09:00 - 09.20	Arrival and late registrations	09:00	Leave luggage
		09.30	Keynote – Dr Frances Harris - Forest School: past research, existing tensions and future priorities.	09.30	Keynote – Dr S Negro ‘Pedagogia del bosco; Roots and evolution of Forest Pedagogy in Italy
		10.15	Refreshments	10:00	Refreshments
		10.45	Parallel oral presentations 1, 2	10.30	Parallel oral presentations 7, 8
				12.30	Question and Answer session
		12.45	Lunch and posters	13:00	Introduction to FSA data collection app
14:00	Registration opens, Refreshments	14:00	Parallel oral presentations 3, 4	13.15	Official closing of symposium
15:00-16.30	Workshops: either Research methodology workshop, or ‘Outdoor Practitioners Relationship with Place’	16:00	Refreshments	13.30	lunch
16.45	Refreshments	16.30	Parallel oral presentations 5, 6		
17:00	Welcome – Dr Sara Knight	18.30	End of day		
17.15 – 18.30	Meet the academic team and social networking	19.30	Meet for trip to Cain’s Brewery		
19:00	Conference meal – Rudy’s Pizza Albert Dock – Pre bookable				

Key Note Plenary

Frances Harris



Forest school is defined as ‘An inspirational process that offers children, young people and adults regular opportunities to achieve, and develop confidence and self-esteem through hands-on learning experiences in a woodland environment’ (Forest Education Initiative, 2005). It is positioned at the nexus of a range of interests, including risk and adventure, which are often a part of outdoor learning; child-led and play-based or experiential learning; supporting personal, social and emotional development through the development of team working and social skills; building confidence through familiarisation and repetition of tasks; and (re)connecting children to nature. This plenary will summarise existing peer-reviewed research on forest school, identifying emerging themes arising from the research, as well as

identifying challenges within the practice of forest school which would merit further research. Key themes include the relationship between forest school and the national curriculum, the impact of forest school on children’s personal, social and emotional development, tensions within forest school practice, forest school and environmental behaviour, development of theories and models of forest school, and the globalisation of forest school. It concludes by identifying areas for further research.

Selima Negro



Roots and evolution of Forest Pedagogy in Italy.

In Italy the Forest Pedagogy movement started to grow 10 years ago. It took inspiration by abroad (Scandinavia, Germany, UK), but it developed in response to specific needs and characteristics concerning Italian families and schools. I would like to share with you the journey of how Forest Pedagogy has developed its identity in Italy, beginning as a grassroots movement and bringing progressively more change in educational settings through experimentation, self-reflection and research. Families have had a central role in promoting initiatives inspired from Forest Pedagogy, both in schools and in autonomous contexts, and have formed alliances with educators and teachers to promote a wider recognition of the benefits of continuous immersion in natural settings and free play, also finding resistance from different sectors of public schools, universities, and politics. Forest Pedagogy had to face also internal struggles and contradictions, mainly because of lack of training and different priorities inside the movement. To continue to be able to spread knowledge and appreciation for this approach, a constant and rigorous work on language and on the narrative around central values has been one of the main tools and has been possible thanks to the centrality of self-reflection in the training and the practice of Forest Pedagogy facilitators (or “accompagnatori”).

Workshops – Wednesday 26th June - 15:00 – 16:30

Monitoring and evaluating Forest School Practice: An introduction to research methodologies for Forest School practitioners

Dr Helena Pimlott-Wilson – Reader in Human Geography; Dr Janine Coates – Senior Lecturer in Qualitative Research Methods - Loughborough University

In this workshop, we will introduce Forest School practitioners (and PhD students / early career researchers who may be looking for new ideas) to research methods suitable for monitoring and evaluating Forest School practice and outcomes for children. This workshop will consider both quantitative and qualitative methods, including choosing and using standardised surveys, developing questionnaires suitable for completion by children of a range of ages, and creative qualitative methods, like photo elicitation. This will be a hands-on workshop. Participants will be encouraged to think about how they currently evaluate their practice, what data might be needed to demonstrate outcomes and how best to collect and communicate their findings.

Outdoor Practitioners Relationship with Place

Jenny Archard - MRes Graduate, School of Outdoor Education, Marjon, Plymouth, United Kingdom

As place-based pedagogies (Brown & Wattchow, 2015; Nicol & Sangster, 2019) are being more commonly discussed and the entanglement that practitioners make with the places they practice is being explored (Lynch & Mannion, 2021; Mikaelis & Asfeldt, 2017), new questions are emerging. This inquiry focuses on one group of woodland outdoor educators in the South West of England and how they *make* and *describe* their relationships with the place where they practice.

As an academic research-exploration, the process of this inquiry was considered as important as what emerged (Murriss, 2021). Taking a post-qualitative, posthuman, new materialist approach, it used a diffractive methodology and analysis, leading to a set of case-assemblages. The inquiry was influenced by Indigenous scholars and methodologies (Corntassel & Hardbarger, 2019; Watts, 2013), offering a different lens for seeing relationships between places and humans. Materials for the inquiry were gathered outdoors, through walking interviews and talking-circle, which took place in the woodland.

Analysis was enacted through three diffraction questions, summarised as Making Kin, Attunements with Place and 'Non-language' Visible. Discussion of the case-assemblages enabled a series of four implications for practice to emerge, which are framed as questions: 1) How can practitioners be supported to spend more time becoming familiar with their places, encouraging them to find ways to shift their perspective towards be-coming with the place? 2) How can practitioners hear or be present to stories of place? 3) How can practices and pedagogy enable more-than-human agency to be included? 4) How can we support educators to trust the instinct to be with their senses, and to be led by the more-than-humans, as well as value their cognitive knowledge?

This paper includes ideas for enacting these four questions, potential new areas of inquiry including work with Indigenous scholars and reflections on the complexity of taking a post-qualitative approach.

ORAL PRESENTATIONS

Session 1

Research Methodology 1.

Time/date: Thursday 27th June - 10.45 - 12:45

Chair

Frances Harris

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Angela Rekers	Angela Rekers	Exploring children's sense of belonging at Forest School using a dialectical-ecological affordance theory	children's participation; Cultural Historical Activity Theory; affordances	USA	1.1
Mel McCree	Mel McCree	First nationwide survey of Forest School, with a focus on land access, equalities and inclusion	international comparison; land access; equality; inclusion; governance.	England	1.2
Joanna Hume	Joanna Hume	What's so special about forest school? Exploring practice within a new materialist/posthuman paradigm.	posthumanism; new materialism; matter; sympoiesis; research; agency.	England	1.3
Sara Knight	S. Knight	Attachment as an Interdisciplinary Issue at Forest School	Interdisciplinary; benefits; nature connection; delivery; practice	England	1.4

Oral Presentations Session 1

1.1 Exploring children's sense of belonging at Forest School using a dialectical-ecological affordance theory

Author: Angela Rekers

Abstract

This presentation focuses on the theoretical and analytical framework used in a doctoral study to explore the participation of reception year children who accessed Forest School one day a week in local woodlands. The theoretical and analytical underpinnings of the study were derived from the layering of environmental affordance theory with Cultural-Historical Activity Theory. This approach emphasises the dialectical reciprocity of the socio-material environment and individual agency that shapes children's experiences – and their experiencing of self – within an educational setting. Children's engagement with each other, the teaching staff, the space and the resources available are considered in relation to their participation in institutional practices from the child's perspective.

In the study, episodes of conflict in the learning environment were chosen for analysis to interpret the child's participation in dialectical reciprocity with the mediating messages being given about 'how to be' in the space, from both child and adult perspectives. Such analysis enables consideration of how children's motive-oriented activity and participation, mediated through the socio-material affordances of the learning environment, shape their perceptions of self as a valued (or not) member of the learning community. Here, some of the findings are presented in order to consider how 'challenging behaviour' may be reframed as an opportunity for recognising all children as already competent learners and in order to theorise why some children thrive outdoors as opposed to indoors.

1.2 First nationwide survey of Forest School, with a focus on land access, equalities and inclusion

Author: Dr Mel McCree

Abstract

I am undertaking a small survey about the state of Forest School in the UK. This builds on my previous research about equality, diversity and inclusion in FS practice, and its governance or lack of. Specifically, I am interested in how land is accessed for FS, as a key under-researched area but one of great impact upon the availability of provision (McCree, 2014; McCree, Cutting and Sherwin, 2018).

With the Natural Start Alliance in the US, data collected through my survey can be compared effectively with the nationwide US surveys achieved in 2021-2.

I am obsessed with the inequities in land access for FS. A key PhD finding was that challenges to land access has restricted and coloured the growth of UK Forest School, and it differs internationally. Further, I have faced challenges accessing sites and supporting others in doing so. I know these challenges first hand and yet there is little research that evidences them.

This issue is significant and timely, due in part to visible inequitable access to greenspace during the pandemic. The rise of eco-anxiety, mental health crises and the rise in nature-based wellbeing practice, point to the growing need for regular, equitable access to nature. Rights to roam continue to hit the headlines.

Finally, we are facing a national crisis in early years provision, school sites and funding. The government has proposed a huge expansion of early years provision, with the extension of ‘free’ places to 1 and 2 year olds.

These needs are addressed in this study’s findings, promoting dialogue around new policy and practice. The results discuss FS as exemplary outdoor practice and update the evidence of challenges to its growth.

1.3 What’s so special about Forest School? Exploring practice within a new materialist/posthuman paradigm.

Author: Joanna Hume

Abstract

This paper presents a new materialist/posthuman conceptual paradigm as a way to explore the special nature of Forest School. It proposes that conventional approaches to Forest School research may leave less-measurable aspects of the practice unexplored. Forest School research is often conducted within well-established qualitative research traditions. Is it possible that researchers and practitioners *feel* that there is something very special about Forest School but have at their disposal only the tools and underpinning onto-epistemological frameworks of conventional educational research? One may argue that this is a position that prioritises the experience of Forest School as it is *constructed by the humans* who are present (Leather, 2012). This traditional research paradigm contains a conceptual separation between the humans and the forest itself. And yet, recent environmental philosophies and scientific discoveries propose an undoing of this separation between human and nature (Tsing, 2015). If we are all made of the same stuff existing in *sympoiesis* (Haraway, 2016) – a collective self-organising force - then might it not be the case that the forest-place itself (the ‘matter’ of Forest School) should merit at least an equal research significance as the humans? Other recent theoretical perspectives align with this *turn to matter* – where matter is seen as having agency – and these perspectives include philosophy (Deleuze & Guattari, 1987) philosophy/physics (Barad, 2007) and feminism/posthumanism (Braidotti, 2019; Haraway, 2016). I draw upon these new materialist/posthuman ideas to establish a theoretical research position which aims to find new ways to develop the evidence base to truly understand the ‘specialness’ of Forest School. I present ethnographic Forest School data and give an account of some of the benefits and also the challenges of moving beyond traditional *ways of seeing* Forest School. I suggest new ways to develop the evidence base to truly understand the ‘specialness’ of the practice.

1.4 Attachment as an Interdisciplinary Issue at Forest School

Author: Sara Knight

Abstract

An interdisciplinary issue at the heart of Forest School is that of attachment. In social care and early years education, attachment theory often references the work of Bowlby and Winnicott, focusing on the relationship between a child and his/her main caregiver (White et al, 2019). Increasingly, the wider implications of secure attachments for life-long learning are also being recognised (Wilson-Ali et al, 2019). Research in the field of outdoor learning has considered attachment to ‘place’ as important to health and wellbeing (Gray and Birrell, 2015). A sense of belonging, in a place and at a time, aids social and emotional growth (Geddes, 2018) and, through Forest School, can also be a vehicle for developing nature connection (Harris, 2021). These interdisciplinary research findings provide insight into the importance of attachment. Despite this, there has been little academic focus on the role of attachment at Forest School.

In this paper, I aim to reflect on how attachment is fostered in Forest School sessions, drawing on an evidence review and my reflections on my own research carried out over the past twenty years. I argue that participation in Forest School sessions creates a sense of belonging for participants. This sense of belonging, or attachment, is a

broader than attachment to a significant other, as it includes attachment to place, where the setting becomes a 'site of lived experiences and meaning making' (Wattchow & Brown, 2011). This in turn fosters confidence, identity and nature connection. The human need to belong is related to the fact that we are a social species, and it has layers recognised in indigenous cultures and possibly lost by modern man. Humans and the planet are healthier if we feel an attachment to a place and the people in that place that in turn is a part of our self-identity.



Time/date: Thursday 27th June - 10.45
- 12:45

Session 2

Access and Experience

Chair

Mark Leather

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Helen Neary	H. Neary ^{*a} , V. Canessa-Pollard ^b & J.Stiller ^c	A whole other world - A qualitative study exploring the subjective wellbeing of parents attending a family forest school programme.	Parent wellbeing, micro community, SEN support	England	2.1
Janine Coates & Helena Pimlott-Wilson	J. Coates, H. Pimlott Wilson	Finding my Tribe: Parental experiences of attending a Forest School toddler group.		England	2.2
Anna Davis	A. Davis [*]	Wellies and wondering: exploring Forest School as a therapeutic space for children	Children's mental health; forest schools; therapeutic space; therapeutic potential; ethnographic study.	England	2.3
Demelza Jones & Alice Goodenough	Jones, Demelza ^{*a} , Goodenough Alice ^b	Exploring impacts of socio-economic context on Forest School and Outdoor Learning provision in Gloucestershire state primary schools.	Forest school; outdoor learning; primary schools; inequalities; socio-economics	England	2.4

2.1 A whole other world - A qualitative study exploring the subjective wellbeing of parents attending a family forest school programme.

Author: H. Neary*^a, V. Canessa-Pollard^b & J. Stiller^c

Abstract

This study explores the psychological benefits experienced by adults participating in Wild Play sessions, a unique woodland-based program affiliated with Forest School principles in the UK. These sessions offer respite and nature-rich experiences primarily to parents and caregivers accompanying children who struggle in mainstream education.

Using a qualitative approach with thematic analysis, semi-structured interviews were conducted with four female participants (mean age was 35 years 3 months, who had been engaging in weekly Wild Play sessions for at least 3 months). The interviews were between 35 mins and 50 mins, and focused on the elements of well-being as captured in Seligman's PERMA model: Positive emotion, Engagement, Relationships, Meaning, and Accomplishment.

We found that the Wild Play sessions offer a nature-rich, safe space for adults, contributing to enhanced well-being by minimizing the demands of daily routines and offering respite from parenting responsibilities. Social interactions in the sessions further contribute to the buffering effect, potentially reducing symptoms of depression and anxiety. Furthermore, the Wild Play sessions create a micro-community that enhances the sense of social connectedness among the adults. Finally, the natural outdoor setting of the sessions aligns with previous research highlighting the restorative benefits of nature. These findings complement existing literature on the importance of everyday environments for mental well-being, as well as recent World Health Organisation's guidance, supporting the concept of Forest School and nature-based interventions as tools to enhance the well-being of adults. By gaining a deeper understanding of the psychological benefits experienced by adults in Wild Play sessions, this research contributes to the growing body of knowledge surrounding the positive outcomes of Forest School programs and their potential to improve family well-being. Further research is warranted to explore the broader implications of these findings and support the development of interventions aimed at enhancing parent/carer well-being in similar settings.

2.2 Finding my Tribe: Parental experiences of attending a Forest School toddler group.

Author: J. Coates, H. Pimlott Wilson

Abstract

Increasingly popular in early years and primary school settings, with growing interest for secondary school populations, Forest School has been recognised as an educational provision which supports children's learning and development (Coates & Pimlott-Wilson, 2019; Tiplady & Menter, 2021). In recent years, and certainly in the wake of the COVID-19 Pandemic, a growing number of Forest School toddler groups targeting parents and their young (aged 5 and under) children, have been established. However, to date, no research has examined the experiences of parents who attend these toddler groups with their children. Indeed, very little research examines the impact of community-based toddler groups / playgroups for parents or their children, outside of intervention groups designed to target specific populations (e.g. Sure Start groups).

This research addressed this notable gap in the literature by examining the experiences of parents who attend Forest School toddler groups. A mixed methods design including online surveys with 118 parents, and follow up qualitative interviews with 11 parents (10 mothers, 1 father) was carried out to examine parents' motivation to attend a Forest School toddler group, the perceived benefits of attending for both them and their child, parenting values and perceptions of 'traditional' indoor toddler groups (e.g. community playgroups). Alongside this, demographic data

were collected. Quantitative data were analysed descriptively, while qualitative data from both surveys and interviews were analysed thematically.

Demographic data showed that most survey respondents were White British (92%), were employed part-time (52.5%), and had a household income of £50,000 or more (57.6%). 85.6% of respondents indicated their child attends a Forest School toddler group with their mother.

Thematic analysis of the qualitative data indicated that parents experienced mental health and wellbeing benefits from attending a Forest School toddler group, including opportunity to develop quality relationships with their children. Parenting values played an important role in motivating parents to seek out and continue to these groups, providing opportunity to meet other parents who shared similar values. Parents also examined the ways their children benefitted from attending in terms of their physical and social development, and how this helped to alleviate some of the perceived challenges associated with raising a young child.

This novel research highlighted the important role nature-based interventions, like Forest School, can have for children and their parents. It also draws attention to issues of inequity in Forest School, and the need to target more diverse families who may benefit from the opportunities Forest School offers in relation to child development, parent wellbeing and parent-child relationships.

2.3 Wellies and wondering: exploring Forest School as a therapeutic space for children

Author: A. Davis*

Abstract

Background: The current crisis in the mental health of children and young people (CYP) in the UK (NHS, 2021; Trafford et al., 2023) is taking place at a time when there is a surge in the growth of Forest Schools (FS) (FSA, 2021). The extent to which the FS setting has therapeutic potential (Rogers, 1957) is under researched, although there are more recent studies covering therapeutic aspects of FS (McCree, Cutting & Sherwin, 2018; Sackville-Ford, 2019). Therefore the aim of this study was to explore the extent to which the in-nature FS setting creates a therapeutic space (Axline, 1947) and if it does, identify any insights into how (Turtle, 2015).

Method: A small-scale ethnographic study was undertaken using Reflexive Thematic Analysis (Braun & Clarke, 2006). Three different year groups were observed at a FS in an education setting, over a combined duration of twelve hours with field notes and sketches being made following the observations. Three FS Lead or FS Assistants representing each year group participated in semi-structured interviews.

Results: The findings revealed four themes: (1) The role of transition from classroom to FS, nature is gathering; (2) Building a relationship with nature, a precursor for change; (3) Partnering with nature, creating agency; (4) Therapeutic encounters, nature meeting child.

Conclusions: The findings indicate the potential for the FS setting to create a therapeutic space and the potential for children to experience therapeutic encounters. Further large-scale research is warranted to develop understanding and add to the practice of the FS model. The insights from this study further provide a contribution to the emerging studies on the practice of nature-based therapy and adds to the call for additional research.

2.4 Exploring impacts of socio-economic context on Forest School and Outdoor Learning provision in Gloucestershire state primary schools

Author: Jones, Demelza*^a, Goodenough, Alice^b

Recent research demonstrates that people from minority ethnicities and with lower incomes encounter more barriers to accessing nature than those who are white British and/or on higher incomes, and children from the UK's most deprived areas, specifically, are 20% less likely to spend time outside in nature than their more affluent peers ([Friends of the Earth 2020](#)). This exploratory project examines if and how these broader inequalities are reproduced or challenged in state primary school settings, through exploration of Forest School or Outdoor Learning provision and facilities in state primary schools with varying socio-economic contexts in Gloucestershire. The paper will draw on practitioner interviews, a survey of Gloucestershire state primary schools and follow up interviews within schools (conducted between January-April 2024), with findings mapped against schools' socio-economic contexts using IMDs and school census data. Existing research into Forest School and Outdoor Learning stresses educational and wellbeing benefits to children who face challenges in classroom learning due to social/emotional/behavioural difficulties (for e.g. [Tiplady & Menter 2021](#)), while work by Mcree ([2014](#)) has also identified inequity in provision on the basis of teacher's access to training, which may be linked to school resourcing. However, we believe this to be the first study to specifically explore relationships between school's socio-economic context and provision, and the Gloucestershire case study will contribute to understanding of inequalities and challenges facing schools, and inform progress towards more equitable delivery.



Session 3
Chair

Forest School Pedagogy 1
Hannah Myers

Time/date: Thursday 27th June - 14:00 -
16:00

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Mark Leather	Mark Leather	Reflections on a critique of Forest School		England	3.1
Joan Whelan	Joan Whelan	Forest School pedagogy in Ireland: successes, challenges and future directions	Forest School; place-responsive; Ireland; Irish primary schools; early years settings; identity	Ireland	3.2
Hayley Bullard	H. L. Bullard	Learning from the past: a case for revisionism in the Forest School approach	pedagogy; early years; historical exploration	England	3.3
Gidon Tal	Gidon Tal* ^a , Gideon Dishon ^a , Dana Vedder-Weiss ^a	'You haven't blessed the forest yet Darling': Enhancing nature connection through relational epistemology	Connection to Nature; Relational Epistemology; Spirituality; Guided Participation; Ethnography, Dwelling	Israel	3.4

3.1. Reflections on a critique of Forest School

Author: Mark Leather

Abstract

It is now over 10 years since the first conceptions of my *critique of Forest School* started to form and as many of my academic colleagues will appreciate, to publish ideas can be a time consuming and lengthy process. I first presented this critique at the International Outdoor Education Research Conference in Dunedin, New Zealand in 2013. I was clearly in the right time and place because what I had to say resonated with many Kiwi outdoor educators. Forest school training, UK style, had recently been imported into the country. The conference presentation provoked many interesting conversations that led to the academic paper published online in 2016.

Since the formal publication in a special issue of the Journal of Outdoor and Environment Education in 2018 titled: *A critique of Forest School, something lost in translation*, there has been considerable interest in this article from trainers, practitioners, and researchers that has also taken my thinking and research in several different directions. I have over 24k reads on ResearchGate and been invited as a keynote presenter, in the UK and internationally.

My reflections, and hopefully insights, on the last 10+ years I will share in this presentation, as well as some thoughts for the future.

3.2 Forest School pedagogy in Ireland: successes, challenges and future directions

Author: Dr Joan Whelan

Abstract

In Ireland, Forest School pedagogy emerged from within the primary school sector in 2012. Over a decade and one pandemic later, Forest School is experiencing exponential growth and name recognition here; by Spring 2023, approximately 300 adults, mostly female, had trained as Forest School leaders.

Links with the UK Forest School movement, associated with the provision of training and access to research and advice, were pivotal in the emergence of Forest School in Ireland. The Irish Forest School Association (founded in 2016) has broadly adopted the six principles of practice set out by the Forest School Association. However, mindful of practicing Forest School as a place-responsive pedagogy (Wattchow & Brown, 2011), and of Forest School pedagogy as responsive to (and challenging of) local public policy and curriculum frameworks, this presentation proposes that the Irish Forest School movement must craft its own identity within the wider Forest School movement. As a contribution to that crafting, this presentation will critically explore the challenges and the successes of the Irish journey to date and set out possible future directions.

The focus of this presentation will be on early years and primary settings. The presentation will draw on the archives of the Irish Forest School Association regarding its vision for Forest School; a survey of trained Forest School leaders in Ireland, conducted in 2021 as part of the development of an Irish accredited training for Forest School leaders, and emergent Irish scholarship at PhD level.

3.3 Learning from the past: a case for revisionism in the Forest School approach

Author: H. L. Bullard

Abstract

Since its introduction to England, the Forest School (FS) movement has grown rapidly with the approach becoming popular in mainstream education. Infiltrating mainstream education settings has been important for gaining interest and acceptance of the FS approach. However, this may have come at a cost to the pedagogical principle of FS with FS leaders navigating the dilemma of whether to meet mainstream settings' expectations or stay true to FS principles. Yet, the FS movement is not the only movement to experience these tensions as it infiltrates mainstream education.

Discussing findings from doctoral research, this presentation explores the impact of this dilemma in an early childhood education context and will argue the case for revisionism in the FS approach. This research took inspiration from the revisionist Froebelians, whose ability to adapt to modern practices, through strengthening the original Froebelian principles, secured a more authentic continuation of the Froebelian kindergarten approach. Thus, the presentation suggests the FS movement can learn from the progression of the Froebelian kindergarten movement.

The research was underpinned by a historical exploration of the two movements in England, that demonstrated two recurring themes in the progression of the approaches. The two themes, instrumental perspectives and revisionist perspectives, informed the development of the Instrumental and Revisionist critical lens. The critical lens was used to analyse data collected through qualitative research with four FS leaders. Using an interpretivist, constructivist approach to research enabled the FS leaders' accounts to strengthen the critical lens to reflect their realistic negotiations between instrumental expectations of mainstream settings and their revisionist principle-led approach to FS. This presentation will discuss the use of the Instrumental and Revisionist critical lens as a model to aid FS leaders' reflections of FS practice and encourage their abilities to promote change through creating a dialogue with mainstream settings.

3.4 'You haven't blessed the forest yet Darling': Enhancing nature connection through relational epistemology

Author: Gidon Tal*^a, Gideon Dishon^a, Dana Vedder-Weiss^a

Abstract

In recent years, Israel has been experiencing an influx of new educational settings, formal and non-formal, that can be labelled as "Forest Education". An overarching goal for forest education practitioners is to create a 'sense of place' and a meaningful connection between children and the natural environment (Cudworth & Lumber, 2021). Studies show that there are several pathways to establish this connection (Cudworth & Lumber, 2021; Lumber et al., 2017). This study sets out to examine the pathways that Israeli forest education practitioners choose in order to connect their student to nature.

We studied a public forest school, in which student spend four days a week in the forest, and holds a unique educational approach that is influenced by native American perceptions of the environment. Relying on an ethnographic approach, which included field notes from 15 visits (overall 90 hours), and semi-structured interviews with teachers. Analyses yielded two main findings. First, practitioners teaching style could be described as one that facilitates learning via "Guided Participation" (Rogoff, 2008). By focusing on how to move and act in the natural surroundings, the practitioners tutor their students on how to dwell in nature. Second, practitioners used two main strategies to enhance their student's connection to nature: (a) using "spiritual" practices such as rituals and

blessings; (b) implementing Relational Epistemology (Bird-David, 1999), in which humans maintain relationship with elements in nature, such as animals or plants, by treating them as subjects – describing them as “who” instead of “what”, as is customary in Western cultures. These practices aim to deepen the connection to nature and reduce the dichotomy between man and his environment.

These findings help to enrich existing research concerning practices that can create a meaningful connection to nature, and expand the repertoire of forest education settings studied throughout the world.

Session 4

SEND and Mental Health

Janine Coates

Time/date: Thursday 27th June - 14:00 - 16:00

Chair

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Samantha Friedman	Samantha Friedman, Roan Noble, Sara McHaffie ^c	A deep, empathetic, wondrous connection': Exploring autistic people's experiences of connection to nature	autism; neurodiversity paradigm; connection to nature; wellbeing	England	4.1
Felicity Cooper	Samantha Friedman Felicity Cooper ^{*bc}	Autistic learners at Forest School: An overview of a growing research field	autism; neurodiversity paradigm; Forest School; autonomy; inclusive practice	England	4.2
Maddie Groom	B. Tuncgenc ^a , A. Emerson ^b , D. Wright ^c , J. Kilgariff ^d , L. Kinnersley ^e , K. Marshall ^f , C. Hand ^c , N. Parks ^b , S. Frazer ^g , A. Bagenal ^g M. Groom ^{*g}	A mixed-methods evaluation of Forest School on mental health and wellbeing in children aged 8-10 years with additional educational needs.	Special educational needs; mental health; neurodevelopmental difficulties; primary school; mixed methods	England	4.3
Sinead Mullally	S. Powell ^a , S.E. Connolly ^b , Constable ^b , H.L., Watkinson ^a , S., McKinnon ^c , I., Watson ^d , S., Moore ^e , H., Mullally ^{*b} , S.L.	Exploring the impact of forest versus traditional school on sensory distress, masking, and wellbeing in autistic youth.	autistic children and young people; forest school; mainstream school; school distress, neurodivergence, perceived stress, wellbeing.	England	4.4

4.1 A deep, empathetic, wondrous connection': Exploring autistic people's experiences of connection to nature

Author: Samantha Friedman, Roan Noble, Sara McHaffie^c

Abstract

While some outdated theories of autism posit that autistic people lack affective empathy, many autistic adults report being very sensitive to the feelings of others (Fletcher-Watson & Bird, 2019; Kimber et al., 2023). Beyond this empathy for other people, Stenning (2020) and Nygren (2023) suggest that strong experiences of empathy are likely felt by many autistic people towards non-human living things as well. Some autistic people also have intense and/or focused passions, including strong interests in nature (Grove et al., 2018), and these passions can play an important role in supporting wellbeing. While there are many anecdotal accounts of autistic people who feel strongly connected to nature (e.g., McAnulty, 2020; Packham, 2016), no research thus far has considered how autistic people define and experience connection to nature.

Using an online survey, co-produced in consultation with several autistic community members, we captured responses from 109 autistic adults on their perspectives of what connection to nature meant to them. We analysed the data using reflexive thematic analysis and developed three themes to reflect the reciprocal relationship many participants described, the religious, spiritual, and ancestral elements of their relationship with nature, and the difficulties that come with having a close relationship with the natural world.

These findings can inform recommendations to support autistic people's relationships with nature in settings like Forest Schools; for instance, by encouraging learners to explore spirituality and ancestry in Forest School sessions or by ensuring practitioners understand that developing a strong connection to nature could also bring along difficulties for wellbeing. In this presentation, I will discuss the process of co-creating this survey and analysing these data, and I will explain why these findings are important for nature-based practitioners who work with autistic people of any age.

4.2 Autistic learners at Forest School: An overview of a growing research field

Author: Samantha Friedman, Felicity Cooper*^{bc}

Abstract

Autistic children and young people often have poorer school experiences than non-autistic peers (Horgan et al., 2022) and are also more likely than their peers to experience mental health difficulties (Lai et al., 2019; Vasa et al., 2019). As a result, many parents seek out alternative options for their children, sometimes as a replacement for traditional school settings altogether. Other parents look to alternative settings as a means of adding to or countering the experiences their child might have in school (e.g., Friedman et al., under review). For these reasons, amongst others, Forest Schools have become an increasingly popular option for autistic young people who enjoy time outside. However, research into autistic people's experiences in nature and at Forest School still lags behind the rest of the field.

Framed through the neurodiversity paradigm, in this presentation, we will first discuss the research we have published on autistic people's experiences in nature and, specifically, the experiences of one group of adolescents taking part in Forest School at a special school in England. We will also review research on perspectives from nature-based practitioners for facilitating outdoor learning, including Forest School, with autistic children in a way which affirms their identities, supports them to thrive, and recognises areas of needed support.

In the second half of the presentation, we will present preliminary findings from a study we are currently undertaking around the effectiveness of Forest School as an inclusive practice, drawing upon the perspectives of

autistic young people to understand how Forest School can promote participation, achievement, and feeling valued. We will describe the process of including the insights of autistic young people in the design of the study and share the implications of these findings for Forest School practitioners who work with autistic young people in independent and school-based contexts.

4.3 A mixed-methods evaluation of Forest School on mental health and wellbeing in children aged 8-10 years with additional educational needs.

Author: B. Tuncgenca, A. Emerson^b, D. Wright^c, J. Kilgariff^d, L. Kinnersley^e, K. Marshall^f, C. Hand^c, N. Parks^b, S. Frazer^g, A. Bagenal^g M. Groom^{*g}

Abstract

Background & Aims: Forest School programmes may benefit mental health, peer relationships, behaviour, school attendance and socio-emotional literacy in children and young people with severe anxiety and/or emotional and behavioural difficulties (Tiplady, 2018). Research so far has evaluated the effects of Forest School on mental health and wellbeing using qualitative methodologies or non-standardised questionnaires (Dabaja, 2021). The aim of this study was to assess the longitudinal effects of a Forest School program on promoting mental health and well-being in children with neurodevelopmental, behavioural, and emotional difficulties, using a pre-post design across two school terms, and mixed quantitative and qualitative methods.

Methods: Children aged 8-10 years recruited from a Nottingham primary school attended weekly forest school sessions during school hours for two terms (24 weeks). Quantitative measures included children's self-rated quality of life (KIDSCREEN), teacher-rated emotional, attentional, peer and behavioural difficulties (Strengths and Difficulties Questionnaire: SDQ), and child-rated problem-solving skills (KIDCOPE). These measures were collected at baseline and 3 further timepoints during the two terms. Observations of the children in the forest school setting were undertaken using a structured coding system (Leuven scale). Teachers and children were interviewed about their perceptions of forest school.

Results: Analysis of the data from 16 children shows significant improvements in HR-QoL (KIDSCREEN) from baseline to timepoint 2. Children's self-rated problem-solving skills (KIDCOPE) improved significantly from baseline to timepoint 4. There were no significant differences in teacher-ratings (SDQ) between timepoints. Reflexive thematic analysis of the child and teacher interviews revealed themes of increased autonomy, creativity, confidence, socialisation, and academic performance.

Conclusions: Findings indicate beneficial effects of forest school in children with additional educational needs living in an area of high economic deprivation. Further analysis on the full cohort (n=32) will be completed in early 2024, including analysis of the structured observational data.

4.4 Exploring the impact of forest versus traditional school on sensory distress, masking, and wellbeing in autistic youth

Author: S. Powell^a, S.E. Connolly^b, Constable^b, H.L., Watkinson^a, S., McKinnon^c, I., Watson^d, S., Moore^e, H., Mullally^{*b}, S.L.

Abstract

Neurodivergent young people, and particularly autistic young people, are significantly over-represented amongst those who experience school distress and school attendance difficulties (Connolly et al., 2023). Sensory processing difficulties, elevated anxiety/demand avoidance, and a lack of understanding of the autistic lived experience amongst educational staff, have all been associated with school distress. As the sensory environment of forest

school offers a rich contrast to the busy, enclosed traditional school environment, we explored how autistic young people's sensory experiences of school and forest school environments compare. We also compared whether levels of perceived stress and anxiety differ across environments. Six autistic young people aged between 11 and 19 years of age were recruited from a local neuro-affirming, PDA-informed, therapeutic forest school. All young people had experience of both forest school and mainstream school. Following an initial introductory in-person session, we conducted two online, semi-structured interviews with each participant. One of these sessions focused solely on experiences at forest school, and the other solely on experiences at school. Overall, participants reported more sensory distress at school, and were significantly more likely to report feeling stressed, upset, panicky, and afraid whilst at school relative to whilst attending forest school. Participants also reported trying to hide their autism significantly more often at school and being significantly less able to think clearly and less able to cope with challenges at school relative to forest school. These findings suggests that a neuro-affirming, therapeutic forest school provision may offer a more accessible learning environment for autistic children and young people and may potentially reduce instances of school distress, commonly associated with traditional school attendance in autistic youths.

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Avril Rowley	Rowley, A, Cont, S	The Natural Curriculum: increasing Primary Teacher	Nature-relatedness, creative, outdoor pedagogies, attitudes, outdoor learning, nature literacy, climate change, connection to nature, global warming, professional development, trainee teachers	England	5.1
Angela Rekers 2 papers	Angela Rekers, Angela McCombs	Collaborative Early Intervention Opportunities for Early Childhood Education and Occupational Therapy (OTD) Students Using a Forest School Approach.	Early intervention; occupational therapy; higher education	USA	5.2
Kelly-Marie Taylor	Kelly-Marie Taylor	"Seeing the wood for the trees": Reflections on Woodland experiences for Higher Education students.	Students, community, nature connection, woodland wellbeing	England	5.3
Ange Garden	Ange Garden	The University Forest School Space in England: Taking seminars outdoors for early years undergraduates	Forest school, seminars, space, learning outdoors, early years	England	5.4

5.1 The Natural Curriculum: increasing Primary Teacher Trainees' Nature Relatedness and engagement in creative outdoor pedagogies.

Author: Avril Rowley

Abstract

Education is critical for the development of young people's climate and nature literacy to engage meaningfully with the debate around global climate change (United Nations, nd) and the nature crisis now faced in the UK (Woodland Trust, 2023). Teachers have been charged with the responsibility to teach young people about global warming, how to adapt to climate change (UN Framework Convention on Climate Change, 1992) and nature recovery (Woodland Trust, 2023). To achieve this, it is important that we educate teachers to have a connection to nature and to care about what happens to the planet (Will, 2023) but many do not feel equipped or confident enough to do this (Pritchard, 2019). This presentation will report on the evaluation of the Natural Curriculum approach in Liverpool John Moores University (LJMU) Primary Initial Teacher Education (ITE) programmes. A key feature of the Natural Curriculum approach is the link between the outdoors and all subjects in the school curriculum which allows student teachers to build it into their everyday practice. Students attend Natural Curriculum immersive workshops throughout their taught programme to introduce them to experiences that improve their own nature connection and increase their competency in using creative outdoor pedagogies. As part of an evaluation of impact, we have measured the extent to which the students' level of Nature Relatedness (NR6) (Nisbet et al, 2009) has had an impact on their perceived competence and motivation to teach lessons outdoors (Barrable & Lakin, 2020). N=310 students' experiences, attitudes and professional development have been measured pre and post sessions to gain an overview of the impact regular outdoor learning has had on their NR6 and their understanding of the impact this will have on the children they teach. Findings show that NR is increased, and students demonstrate improved competence and willingness to teach outdoors.

5.2 Collaborative Early Intervention Opportunities for Early Childhood Education and Occupational Therapy (OTD) Students Using a Forest School Approach

Author: Angela Rekers, Angela McCombs

Abstract

This presentation draws from an ongoing interprofessional research project involving early childhood education and occupational therapy students from a private Midwest University. The study aims to explore the following questions: Do students' analysis of early childhood behaviours improve after interdisciplinary experiences? To what extent do interprofessional collaborations have on student's learning of their professional role and other professional roles? What role does the outdoors play in supporting children's learning and development from an early intervention perspective?

The World Health Organization (2010) published The Framework for Action on Interprofessional Education and Collaborative Practice, stating the importance of interprofessional education to prepare future collaborative practitioners and educators. Yet, limited research is available on effective approaches to interprofessional collaboration among educators and occupational therapists in academia. The goal of interprofessional learning (IPL) is to improve students' knowledge, attitudes, skills and behaviours within their own field as well as collaborate and communicate with other professionals to enhance overall well-being (WHO, 2010). Almendingen et al. (2021) studied the IPL preparedness of students from health, social care, and teacher education backgrounds. The study showed that only 13.5 percent of students learned about other professional roles. The need to develop more IPL opportunities for education and occupational therapy studies is noted. Occupational therapists (OTs) are key

collaborators within the educational team as they help improve students' social, verbal, and behavioral skills and address the physical and mental health of children (AOTA, 2016; AOTA, 2020).

While there is a growing body of research related to children's outdoor play and learning that suggests that children benefit from opportunities to regularly engage in playful activity in a variety of outdoor spaces, there is limited research considering how the outdoors may be utilised in collaborative, early intervention. The workshop will provide opportunities to experience the interdisciplinary benefits of occupational therapy and early childhood education outdoors for children's development and well-being.

5.3 “Seeing the wood for the trees”: Reflections on Woodland experiences for Higher Education students.

Author: Kelly-Marie Taylor

Abstract:

This presentation focuses on findings and reflections from pilots of woodland experiences for Higher Education students. Forest School is a rapidly growing pedagogical approach, and the benefits are extensively supported by research. Forest School for adults is a relatively new concept and idea, though Forest School adult wellbeing groups can be found.

Student wellbeing is a focus issue for universities and a public and political concern. There has increasingly been a focus on universities providing a whole university approach to wellbeing support through policies and interventions and embedding mental health initiatives across institutions (Jones et al 2021). Engagement with the Forest School ethos has long been associated with an impactful increase on emotional wellbeing of its participants, Tiplady and Menter (2021) support this claim through their research into Forest School for wellbeing. These findings are supported in research by McCree, Cutting and Sherwin (2017) who found in their study that children's social development and emotional wellbeing was supported by regular outdoor Forest School sessions. Furthermore, this then had a positive impact on children's attendance and academic attainment. They argue that the programme enhanced the children's resilience and confidence through exploring the outdoor space and connecting to nature (McCree, Cutting and Sherwin 2017). This presentation evaluates and reflects on woodland wellbeing pilot sessions with a range of Higher Education students. It considers the role of Forest School and Nature Connection in supporting student wellbeing and community. I critically evaluate the benefits alongside barriers and limitations to Higher Education Forest School programmes.

5.4 The University Forest School Space in England: Taking seminars outdoors for early years undergraduates

Author: Ange Garden

Abstract

Outdoor natural spaces are seen as not only physical locations but also shaped by human interactions, cultural practices, and political processes. University seminars were conducted in the on-campus Forest School. Focusing specifically on the development of early years educators in England, the exploration of outdoor natural spaces reveals a multifaceted dimension that extends beyond mere physicality. A convenience group of 25 participants comprising early years undergraduates were selected for a focus group that took place around a campfire after a series of seminar discussions. Thematic analysis of the data revealed the themes of collaboration, creativity, and cultural boundaries. Drawing upon Lefebvre (1991) and Massey (2005), this research highlights the potential for new educational spaces beyond the traditional indoor classroom and the benefits of incorporating nature into early years learning environments.

Session 6

Forest School Pedagogy 2

Time/date: Thursday 27th June -

16:30 - 18:00

Chair

Helena Pimlott-

Wilson

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Elaine Wright	*E. Wright	The Lived Experiences of Staff Involved in Adapting a Forest School Model to Fit with the Local Culture and Environment in one Private School in the United Arab Emirates.	Forest School; United Arab Emirates; culture and heritage; international education; outdoor learning.	Glasgow / UEA	6.1
Larraitz Altuna	Larraitz Altuna ¹ , Jon Diaz ²	Forest schooling and socio-ecological education: An integrative framework	socio-ecological education; primary; forest school; integrative framework; nature connectedness;	Spain	6.2
Frances Harris	Frances Harris	Journeys through Forest School	Forest School; Negotiated learning; Learning Space;	England	6.3
Shin Ee Chong	Chog Shin Ee, D. Quek	The Earth's Spine: Examining Educational Frameworks and Ways of Life in Forest School Singapore	Education, Environment, Children, Play, Nature.	Singapore	6.4

6.1 The Lived Experiences of Staff Involved in Adapting a Forest School Model to Fit with the Local Culture and Environment in one Private School in the United Arab Emirates

Author: *E. Wright

Abstract

Originating in Scandinavia, Forest School (FS) has been adopted in various forms globally. There are many benefits to FS and the approach is currently being used in the United Arab Emirates (UAE), which is not the typical physical environment for FS. The purpose of this study was to investigate the lived experiences of staff in one school involved in adapting a FS model to fit with the local culture and environment in the city of Al Ain, in the UAE. This qualitative study followed a hermeneutic approach. Data was collected on the topic through two semi structured interviews with staff from a case study school. Documents were also analysed which related to FS or the culture and schooling system of the UAE. Thematic analysis of the data revealed that the FS pedagogy offers a flexible approach and encourages contextualisation. This was reflected to a small extent in the changes which were made to the FS project in the case study school. The most significant adaptation was the change of name from Forest School to Desert Discovery. Several local resources were incorporated into the physical area such as sand, spices and local style fencing; however, this was juxtaposed with resources which did not reflect the local context. Recommendations from this study include staff training to make practitioners aware of the FS philosophy and the freedom to adapt it to the local environment. Input from a member of the local community would also aid this process. Training in intercultural awareness would enable staff members to identify aspects of local culture which can be incorporated into a project such as FS. Further research could interview a wider range of staff on the concept of FS in the UAE and, document analysis of FS lessons plans in this context could reveal further cultural adaptations.

6.2 Forest schooling and socio-ecological education: An integrative framework

Author: Larraitz Altuna¹, Jon Diaz²

Abstract

The primary element for any forest school initiative is reconnecting with nature; daily and continuous contact with the natural environment. In a historical horizon of polycrisis and socio-ecological transition, what do we mean by nature? Under what terms is this *reconnection* to be interpreted? Is it possible to integrate forest schools and climate change education within the same educational proposal for primary education? Our working hypothesis is affirmative. Our ongoing research is two-fold: the creation of an integrative conceptual framework, and the implementation of a pilot project involving several schools in the Basque Country that already run forest school sessions for primary students. Firstly, the aim is to develop a conceptual framework based on the definition of nature as an organised system of ecosystems (Riechman, 2005), and as a reservoir and flow of materials, organisms and energy, while recognising elements which are not material but, rather, relational (Rosa, 2019; Chan et al, 2016). This will also analytically distinguish the material, experiential, cognitive, emotional and philosophical dimensions of connection to nature (Beery et al, 2021; Ives et al, 2018). From an early age forest schools strengthen the bond with nature from an emotional and experiential point of view (Chawla, 2020; Barrable, 2019; McCree et al, 2018; Harris, 2017). At the same time, now that forest school methodology is being introduced in primary education, additional emphasis and educational intentionality is placed on the material and cognitive dimensions of *reconnection* with nature. This means that curricular content associated with climate change education can also be integrated. The *connection/disconnection* category allows us to address global meat production and consumption chains, fossil culture and the energy crisis, to give just a few examples, and highlight our profound eco-dependence.

6.3 Journeys through Forest School

Author: Frances Harris

Abstract

Forest school is a widely adopted form of outdoor pedagogy which is commonly practised in schools in the UK. Proponents claim it is beneficial to most children who attend. Numerous studies report on what is involved and its impact on specific groups of children (Harris, 2022), but underpinning theories of why and how it works are less common. This paper will draw together the findings of a research project which focussed on forest school practitioners' perspectives of children's experiences at forest school. The research focussed on practitioners' perspectives of what children were learning at Forest school (Harris, 2017); the significance of taking children from the classroom to an outdoor learning space (Harris, 2018); and how children responded to Forest school sessions (Harris, 2023). This paper draws together the findings of this research to focus on how and why this pedagogical approach is effective across a wide range of children. The paper suggests that the choice of activities coupled with the child-led ethos enables children to negotiate their learning while at forest school. This is enabled by the more permissive outdoor learning space which allows children to engage with and respond to Forest school in different ways, according to their own developmental needs, and the forest school practitioners who act as facilitators of learning. Thus Forest school provides opportunities for children, supported by forest school leaders, to create their own individual learning journeys through Forest school sessions and each benefit in their own way.

6.4 The Earth's Spine: Examining Educational Frameworks and Ways of Life in Forest School Singapore

Author: Chog Shin Ee, D. Quek

Abstract

In this article, I will compare the Singaporean education system with Forest School Singapore's (FSS) approach to education. This comparison is not to suggest that one system is better than the other, but to bring out the point that alternative forms of education other than the mainstream are available, and to see the ways in which better understand how FSS and the mainstream Singaporean education system may complement or contradict one another. Although there are alternatives to the mainstream education system, such as homeschooling or private schools, the reason for focusing on the mainstream is because, as its name suggests, is the main form of education undertaken by most Singaporean students. I argue that Forest School Singapore provides a framework of education that departs very sharply from the norms in Singapore, given that its goals are starkly different from mainstream forms of education. With this sharp divergence from normative standards of education, I argue that there are many affordances: namely, in how FSS tries to cultivate a holistic understanding of the self, the world and the universe. To demonstrate my argument I will examine Forest School Singapore's three main 'tenets': the (1) child-led or child-centric approach, (2) the nature-led focus on the environment and the space that we occupy, as well as a (3) context-led focus on recognising the communities of people that we find ourselves entangled, or interwoven with (people around us, people who have come before us, and people who will come after us).

To carry out this research, I have embarked on an embodied fieldwork approach to gather insights from the people on the ground. I also utilised interviews with different FSS coaches to gather their opinions on forest school with regards to education. Some of these interviews have been verbal, face-to-face interviews, while others have chosen to reply to my interview question via writing. By interviewing a wide range of coaches and people involved in Forest School, I could see how they held different perspectives on the FSS ways, but also how these perspectives sometimes overlapped or resonated.

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Anne Berrington	C. Hammond S. Ahern	An implementation evaluation of forest schools play provision for pre-school children in Bradford	forest school; nursery; deprivation; diversity	England	7.1
Harriet Menter	L.S.E Tiplady* ^a , H. Menter* ^b	'A tree civilisation' building a strong structure: research partnerships in Forest School	research partnership; theory of change; dialogic; research integrity.	England	7.2
Tracey Martin-Millward	T Martin-Millward	Adult-child dialogue at Forest School: an analytical framework to support reflective practice	dialogue; child-centredness; hermeneutic analysis; agency.	England	7.3
Jane Owen	J.E. Owen	Using Participatory Research with young people to explore the value of forest school activities for their wellbeing.	wellbeing; Photovoice; participatory research; young people; teenagers; enrichment; curriculum design	England	7.4
Maddie Groom	N. Parks, A. Emerson B. Tuncgenç J. Kilgariff ^c , D. Wright ^d , K. Marshall ^e , C. Hand ^d , L. Kinnersley ^f , M. Groom ^g	Forest School as reinvention: An interdisciplinary mixed methods case study	Opportunity; personal growth; mixed-methods	England	7.5

7.1 An implementation evaluation of forest schools play provision for pre-school children in Bradford

Author: C. Hammond S. Ahern

Abstract

Background: While Forest School activities have been successfully implemented across the UK for school aged children, there remains a shortage of evidence related to Forest Schools in the pre-school age group. Better Start Bradford (BSB) commissioned the Forest Schools Play project between 2018 and 2024 to deliver activities with early years settings within the BSB area. BSB is part of the 'A Better Start' programme aimed at improving the outcomes for children living in one of the most socially and ethnically diverse areas of the UK. BSB set out to explore the feasibility of delivering Forest Schools in the early years and to establish potential for further evaluation. Activities were run for children aged 3-4, already attending early years settings. Forest School facilitators worked with staff to deliver 9-10 weeks of activities in local forests, parks, and green spaces. Funding was also available to improve settings' resources for outdoor play, and Forest Schools qualifications were offered to early years staff and parents of participating children with the aim of developing a sustainable culture of outdoor play in the area.

Methods: An implementation evaluation was completed using quantitative project monitoring data to compare performance against anticipated figures and to determine whether the project logic model was applicable in action.

Findings: The Forest Schools Play project was delivered with high fidelity in all key areas. They achieved high levels of engagement of children and levels of course completion and satisfaction amongst participating families was high. The project trained more early years staff than anticipated and engaged with a significant proportion of nursery settings within the area suggesting potential for sustainability although this remains untested. This implementation evaluation showed a successful model for delivery of Forest Schools in an area of high poverty and ethnic diversity and indicates potential for effectiveness evaluation.

7.2 'A tree civilisation' building a strong structure: research partnerships in Forest School

Author: L.S.E Tiplady*^a, H. Menter*^b

Abstract

Forest School in the UK is informed by a rich pedagogical history and has evolved through practice since the 1990s (Cree and McCree, 2012). More recently there has been a development of research that has largely sought to document the benefits of the approach, along with the challenges faced (Harris, 2022). In researching Forest School, it is essential to engage with communities delivering provision, whether that be early years settings, schools, charities or independent organisations, and those participating (most often children and young people and their parents and carers).

There are significant benefits to both the Forest School and research communities in working together but it is also the case that research partnerships in education and community settings face many challenges and possible tensions. The authors will share their experiences of a university-practice research partnership which has developed over the past seven years and includes a university researcher, education manager from a local charity, a growing network of schools, the children and young people who participate and their parents and carers. Using the analogy of a 'tree civilisation', a project devised by one of our schools, we will discuss the importance of building a strong structure that both incorporates everyone's ideas and efforts and is ultimately safe and robust. We will examine the use of 'theory of change' as a dialogic method in articulating contexts, anticipated pathways to change and desired outcomes between partners and developing shared data collection strategies that evidence impacts whilst prioritising 'shared learning' (Laing, 2022). Finally, we will explore concepts of trust, reciprocity, flexibility and

‘everyday ethics’ (Banks et al., 2013) in enacting the research and how these play out within the partnership and Forest School settings, whilst maintaining academic rigour and integrity.

7.3 Adult-child dialogue at Forest School: an analytical framework to support reflective practice

Author: T Martin-Millward

Abstract

An approach to outdoor learning, the UK Forest School (FS) ethos is framed within a woodland context and a learner-centred pedagogy, defined by six ‘principles’ (FSA, 2012). However, practice remains variable (McCree, 2019), and academic literature examining the nature of FS pedagogical practices, and enactment by practitioners, is limited.

In this paper, I present aspects of my doctoral research (completed in 2020), which explored the nature of child-centredness within adult-child dialogue at FS. Social interactions are said to effect a ‘shared process of meaning-making’ (Cree, 2014), although, the exact nature of this process is variably understood and exemplified in practice. To elicit conceptualisations, enactments, and experiences of a child-centred pedagogy at FS, data was collected from three primary school settings. The dataset comprised audio recordings of five forest school leaders’ (FSLs) and 38 children’s talk during FS sessions, triangulated against adult (n= 8) and post-FS session child interviews (n = 17). Hermeneutic analysis was conducted in three stages, adopting multiple theoretical lenses. This included question-level analysis of adult-posed questions, and in-depth scrutiny of 26 inductively identified adult-child interactional events, termed ‘potential critical moments of child agency’ (Martin-Millward, 2020). These extracts of talk, central to promoting child-centred learning, were analysed to consider latent and semantic meaning within the dialogue.

Findings highlighted a tension between practitioners’ beliefs in the principle of learner (child)-centred learning, and how this is enacted in practice; the *what*, and *how* children learn can be (however unconsciously) constrained by practitioner talk. This research has relevance for FS practitioners; the framework offers tools which may support individuals’ reflection on their pedagogical practices, for example to consider how dialogue with children subliminally ‘communicates’ adult expectations of children as active, co-constructors of knowledge, and whether opportunities for child-centred learning are maximised or overlooked through privileging *product over process* in educational dialogue.

7.4 Using Participatory Research with young people to explore the value of forest school activities for their wellbeing.

Author: J.E. Owen

Abstract

In line with the conference themes, I plan to present an evaluation of Participatory Research through Photovoice for forest school projects with young people. It is hoped that some of the young people, co-constructors of the project, will join me in presenting our experiences at the conference. As this research is currently ongoing, a brief discussion of our findings will also be included.

The broader aim of the research is to understand how forest school experiences could be of value for young people aged 16 – 19 years, as an educational practice to support wellbeing. This theme emerged from observing the impact of forest school on younger children and developed into an action research activity for learners in an FE college. The participants experienced forest school activities aligned with coaching conversations and an article on this original project was published in *Coaching Today for BACP* (Owen, 2020), which led onto the planned research project for an MPhil in Education.

PR and Photovoice both support the notion of young people being an integral part of the research rather than having the research 'done' to them (Cornwall and Jewkes, 1995). This project has been designed in a way which encourages young people to have agency over the research decisions such as data analysis themes and dissemination approaches.

Young people's perceptions of agency, autonomy, and control over experiences are linked to feelings of positive wellbeing (Ryan and Deci, 2017) which have been a key element in planning this research. Equally, from an education standpoint, there is a desire within the project to support young people in developing research skills including the opportunity to present our findings to a wider audience, including conferences.

7.5 Forest School as reinvention: An interdisciplinary mixed methods case study

Author: N. Parks, A. Emerson B. Tuncgenc J. Kilgariff^c, D. Wright^d, K. Marshall^e, C. Hand^d, L. Kinnersley^f, M. Groom^g

Abstract

A ten-year-old boy with challenging behaviour in school was selected as part of a group to attend Forest School for two terms. The school was identified to take part in the study, being in a socially deprived area of the City of Nottingham. Quantitative data were collected initially and at three subsequent timepoints. Qualitative data comprised two interviews with the child, conducted by an independent counsellor, interviews with his mother and teachers and four sets of Forest School observation data. Both sets of data demonstrate a positive trend in respect to emotions, conduct, and peer interactions. His Forest School experience provided an opportunity for skill development and autonomy that contributed towards personal growth and pride, in place of the shame his behaviour sometimes led to in school. He was fully aware and appreciative of the environment as a place of peace where he could escape and self-soothe. He spoke of the oppression of the buildings around him at school and spent his time at Forest School cooking and swinging in the hammock. He was able to develop an attachment with the Forest School teacher unlike with other adults in his life. Overall, his attendance offered him the possibility of reinvention and discovering a new self. We will present our data and perspectives from a multi-disciplinary team of psychologists and educators.

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Sarah Burton	SJ Burton	Into the woods with young children, posthumanism and critical disability theory	disability, early years, play,	Scotland	8.1
Katherine Jameson	B. Gibson ^{ac} , E. Ashworth ^a , L. Newson ^a , K. Jameson ^{*b} & J.M.Sayers ^b	An examination of an outdoor learning (forest school) intervention for young people at risk of exclusion.	forest school; adolescents; exclusion, outdoor learning; behaviour; wellbeing; delinquency;	England	8.2
Harriet Dunn	H.R.Dunn	Exploring accessibility: investigating perspectives of children and young people with Special Educational Needs and Disabilities in the Forest School environment	engagement, participation, inclusion, special educational needs/ disability	England	8.3
Lauren Bourn	*L. Bourn ^a , N. Kargas ^a , L. Pickerell ^a , K. Pennington ^a	Professional perspectives and practices of UK Forest School programmes: A national survey	autism; forest school; inclusion; service delivery; children.	England	8.4

8.1 Into the woods with young children, posthumanism and critical disability theory

Author: SJ Burton

Abstract

This presentation explores the play experiences of four young children with additional support needs in two woodland-based settings in Scotland in order to challenge and expand ideas about play in the woods. It draws from my professional doctorate studies, which I come to as an early years practitioner and forest kindergarten/school practitioner.

Nature or forest kindergarten experiences are viewed in terms of how they benefit children's development or support their wellbeing (Johnstone et al, 2021). Studies either exclude disabled children (Prins et al, 2022) or frame their experiences within specialist settings according to a particular disability (Friedman et al, 2022).

Historically, impairment was bound up with ideas about poverty, disease and disorder and considered potentially curable by doses of nature in ways which continue to permeate our thinking in the UK (Thyssen, 2019). Nature continues to be used to define childhoods and potentially exclude and silence those who are perceived to be different to unspoken societal ideals (Harju, et al 2021).

Disabled children experience barriers to accessing play spaces enjoyed by non-disabled children (Horton, 2017). While the number of nature-based early years settings in Scotland is increasing, research by a Scottish learning disability charity (SCLD, 2022) indicates that families of learning-disabled children struggle to access their entitlement to early years spaces, suggesting that nature-based early years settings may not be socially just and inclusive spaces.

At a time of climate crisis we need new ways of thinking about human relationships with the our non-human natural environment. Posthumanism's emphasis on relational 'becoming' and the idea of disability as 'a relational concept' that can be interrogated in order to 'broaden what it means to be human' (Goodley et al., 2016) offer opportunities for rethinking disability and play for young children in the woods and help us recognise the connections between social and ecological justice.

8.2 An examination of an outdoor learning (forest school) intervention for young people at risk of exclusion.

Author: B. Gibson^{ac}, E. Ashworth^a, L. Newson^a, K. Jameson^{*b} & J.M.Sayers^b

Abstract

Outdoor learning programmes including forest school approaches are underutilised as an intervention to support the needs of particularly vulnerable adolescents, including those at risk of exclusion. This study aimed to explore the feasibility of an outdoor learning intervention to improve at-risk adolescents' social and emotional wellbeing and reduce risk of future involvement in anti-social behaviour and criminal activity.

We qualitatively explored young people's and intervention staffs' experiences of the programme. Young people (aged 11-16) were identified by a Merseyside school as being at-risk of exclusion, and asked to completed measures assessing well-being, resilience, stress, behaviour, self-regulation, and attitudes towards delinquency. Young adults (ages 16-19) from a previous cohort, were also interviewed to assess longer term impact.

Results showed statistically significant improvements in perceived stress levels and goals and aspirations after participating in the intervention, whilst themes highlighted possible intervention mechanisms and suggesting long-term benefits to wellbeing, pro-social behaviours, and individual life and career prospects.

Despite a limited sample size, we found the forest-based intervention showed promise in supporting the various social, emotional, and behavioural needs of this unique, vulnerable group of young people.

8.3 Exploring accessibility: investigating perspectives of children and young people with Special Educational Needs and Disabilities in the Forest School environment

Author: H.R.Dunn

Abstract

Opportunities for learning outside traditional classroom environments, such as the Forest School setting, is a key theme underpinning the Education Studies programme at Liverpool John Moores University.

Access to outdoor learning environments is conducive to children and young people's (CYP) creative learning and development (Clement, 2004; Louv, 2005). These natural settings provide opportunity for CYP to use their imagination, problem solve and gain confidence, moving beyond classroom-based learning (Rea & White, 2009). Forest Schools in the UK have become a relatively popular approach to outdoor education (Garden & Downes, 2003). Exposure to natural resources provides CYP with a wealth of opportunities for pedagogical and self-directed learning. Existing research regarding CYP with SEND participating in creative activities via outdoor learning (Price, 2018; Bradley & Male, 2016), largely focuses on mental health perspectives. However, there currently exists no research exploring engagement and participation in Forest School for CYP identified as having visual impairment (VI).

Experiences teaching on the *Exploring Inclusive Practice* module, where students participate in a Forest School session, enabled discussion about ways CYP with SEND may or may not be able to participate in these creative opportunities, thus becoming 'othered'. This led to receiving funding to conduct research during academic year 2023-24 into the experiences of CYP with VI engaging in Forest School, addressing the knowledge gap in the field. This also draws upon practitioner pedagogical perspectives facilitating Forest School sessions for these CYP. A body of research is created by working with a local specialist school which seeks to explore whether the outdoor learning environment is fully accessible to a range of SEND and the extent to which CYP are made to feel welcome and included, or othered. Additionally, it is discussed how Forest School can link to existing opportunities for outdoor learning within the school/ university curricula.

8.4 Professional perspectives and practices of UK Forest School programmes: A national survey

Author: *L. Bourn^a, N. Kargas^a, L. Pickerell^a, K. Pennington^a

Abstract

Forest School is generally promoted as beneficial for autistic children and young people, however, there is limited research to date which has provided evidence for this. To address this research gap, our study aims to: 1) Evaluate how closely Forest School practitioners follow the six principles of the Forest School ethos with their autistic and non-autistic learners; 2) Explore Forest School practitioners' perceptions of their autistic and non-autistic learners' connection to nature and learning autonomy; 3) Explore Forest School practitioners understanding of autism, communication of needs, and any autism specific adaptations made when planning and delivering sessions. To do this, we have designed an online questionnaire which is currently being distributed nationally to UK residents over

18 years old who identify as Forest School practitioners. Our research draws upon the six principles of the Forest School ethos and adaptations of 'connection to nature' and 'learning autonomy' measures. Data is being collected using mixed methods; quantitative data will be analysed to compare perceptions of autistic and non-autistic learners. Qualitative data will provide more detail of reported adjustments made to Forest School sessions that accommodate autistic learner's needs. The emphasis of our research will be on differences, not deficits, between autistic and non-autistic learners. We anticipate that our findings will provide preliminary empirical evidence that confirms or contradicts the benefits associated with Forest School for autistic learners. This evidence will help guide the provision of Forest School activities for autistic learners.

Poster Presentations - Thursday 27th June 2024 – 12:45 – 14:00

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Gill Hearnshaw	G.M. Hearnshaw* ^a , R.J. Nesbit ^{a,b} and H.F. Dodd ^a	Feeling, doing, thinking, being. A qualitative investigation of children's self-reported experiences of play in two UK city primary schools. With a focus on emotions, adventurous play, social interaction and the play environment.	adventurous play; challenge; nature; emotions; children; school	England	P.1
Marine Jacq	M. Jacq* ^a , P. Marzin-Janvier ^a , D. Grenier ^b	Learning and Forest School	Forest School ; knowledge ; praxeology ; relationship with the living world	France	P.2
Mell Harrison	Mell Harrison	A methodological approach to the monitoring of behaviour and progress at Forest School	community; personal; environmental; practical; social	England	P.3
Selima Negro	S. Negro	Sense of place and self-directed learning in forest pedagogy in autonomous learning spaces dedicated to 6-11 years old in Italy	homeschooling; self-directed learning; base camp	Italy	P.4

Presenter	Paper Authors	Title	Keywords	Nationality	Abstract number
Caroline Edmonds	A. Hepworth *C.J. Edmonds	An exploratory study of Forest School practitioners' views on the benefits of and barriers to children's participation in Forest School	practitioners; benefits; barriers	England	P.5
Nicola Gardiner	N. Gardiner and J.McMullen	Forest School Practice within UK Mainstream Primary Schools; Practitioners' Experience of Including Children with Autism Spectrum Disorder	Forest School; mainstream; primary; autism spectrum disorder	Ireland	P.6

P.1 Feeling, doing, thinking, being. A qualitative investigation of children's self-reported experiences of play in two UK city primary schools. With a focus on emotions, adventurous play, social interaction and the play environment

Author: G.M. Hearnshaw^{*a}, R.J. Nesbit^{a,b} and H.F. Dodd^a

Abstract

"I'd say it probably made us feel brave... when we climbed a bit of the trees... I'm probably proud... but I think they don't want it to get damaged, so that's why they don't let us go on it until it's Forest School." (Year 6 girl) "I don't like jumping off things 'cos, like, it's pretty naughty." (Year 2 girl). Adventurous or risky play, during which children experience feelings of excitement and thrill, has broad benefits for physical, social and emotional development [1-3]. It is theorised that children have a natural drive to engage in this type of play, which develops their ability to cope with uncertainty and physiological arousal and consequently reduces their risk for developing problematic anxiety [4]. With declining opportunities for children to play outdoors, schools, as a universal provision in the UK, are becoming increasingly important for equitable access to adventurous play outdoors [5, 6]

This research examines children's experiences of play at their schools following an intervention to increase opportunity for adventurous play and variety of play at playtimes. Children attended two primary schools (one with Forest School provision). Using visual aids depicting and naming emotions, one-to-one semi-structured qualitative interviews were conducted with 19 children aged 7 – 11 years. Interviews focused on feelings, adventurous play, change, choice, social interaction and the play environment. Reflexive thematic analysis will be used to code and develop themes capturing shared meaning from interview transcripts [7]. Children spoke about their experiences of adventurous play, change, and the play environment. More specifically, they highlighted their emotions, perceptions of danger, their rights, football, nature, learning new skills, and Forest School. The results of this research will be relevant to practitioners and those interested in children's perspectives on their play and how these link to Forest School experiences and outdoor play more generally.

P.2 Learning and Forest School

Author: M. Jacq^{*a}, P. Marzin-Janvier^a, D. Grenier^b

Abstract

Our research work aims to identify knowledges at stake and the way children may acquire them through attending a forest school session. Previous studies about learning in Forest School show that children may develop increased knowledge about nature, biodiversity and environment, a better understanding of the outdoors, and an improved relationship with nature (Smith et al., 2018). We now wonder about the "relationship with the living world" (Dell'Angelo-Sauvage, 2008) that children may develop, in particular the scientific knowledge they may mobilize. Our research is dealing with didactics and we use the concept of "praxeology" which comes from the "anthropological theory of didactics" (Chevallard, 1999). That framework helps us to define Forest School as what Chevallard called institution and the ten forest schools we studied as micro-institutions. We rely on different types of resources. Firstly, books that could be references for the institution (Wauquiez, 2009 ; Knight, 2016 ; Cree & Robb, 2021 ; d'Erm & RPPN, 2022). Then, we carried out eight semi-structured interviews with forest school practitioners. Finally, observation notes and workshop videos were analyzed. We model several types of praxeological organisations from the different sources: proposed (from institution), described (from the forest school practitioners) and carried out (by children). The *praxis* accounts for what children do and how they do it (types of tasks and techniques used to perform the tasks). After comparing some of these techniques with the inquiry learning approach (Dewey 1938/2014), we observe few similarities. The *logos* justifies and explains the techniques. Forest School institution advocates a "connection to the living world" (FSA, 2013 ; RPPN, 2018), thus we use the concept of "relationship with

the living world” to model the *logos*. This relationship contains affective, cognitive and sensory elements that differ depending on the micro-institution

P.3 A methodological approach to the monitoring of behaviour and progress at Forest School

Author: Mell Harrison

Abstract

Kinda Education CIC (Kinda) provides intergenerational, sociocratic, nature-based Forest School working from a pedagogy based around kindness and community. Kinda “tribes” include Alternative Provision for primary aged pupils (AP), Elders, Family, Women, and Home educated children. AP children often have severe Social and Emotional Mental Health needs. Current government policy recognises that mainstream schools are not always best placed to provide for the needs of every child and effective early intervention such as that provided at Kinda is key to breaking vicious cycles (‘SEND Review’, 2022). Trained Kinda staff contribute to monitoring the progress of individual children using its own development chart called PEPSC. The framework observes behaviour and progress in five areas: Personal, Environmental, Practical, Social, and Communal. These are, in turn, linked to the 6 Principles of Forest School. In this way we are capturing the tangible progress that the children make as a result of the time they spend at Forest School. Each aspect is

aggregated into scales, which provides quantitative scores in addition to descriptive statements. The records are currently stored securely and are used to provide parents and other professionals working with the families with supporting information about the child’s progress with us. However, we feel strongly that this data, suitably anonymised, could make a valuable contribution to Forest School research and invite interested academics to work with us.

P.4 Sense of place and self-directed learning in forest pedagogy in autonomous learning spaces dedicated to 6-11 years old in Italy

Author: S. Negro

Abstract

In 2022, I began research on initiatives based on Forest Pedagogy and dedicated to children over 6 years old as an alternative to school in Italy (children that are formally home schooled and attend a Forest School every day). I conducted a series of observations and interviews that led to some reflections that I presented in July 2022 to IOERC9. A key point that emerged unanimously from parents and practitioners was the belief that being outside was still a fundamental aspect for the learning experience for the children, but some strategies needed to be implemented to support the complexity of learning pathways that emerges in a group of children aged 6 and older. I then proceeded with a specific research question: what kinds of "outside" and what kinds of interactions between children and the environment are used to facilitate self-directed learning (Fisher 2022) with children older than 6 years old in Forest Pedagogy? I used the documentation of everyday activities shared during the meetings of an Italian network of Forest Pedagogy practitioners and I observed two main strategies:

- Reinsert into the organization of spaces, materials and practices that relate to the "classroom" model, both inside and outside.
- Working on a fluid and non-predetermined contamination of spaces and materials with the aim of expanding the possibilities for meaningful experiences, supporting the construction of a sense of place, and using the base camp model of Forest Pedagogy.

I identified some limitations and advantages of these two strategies and collected a few significant examples of the latter, that show the different ways in which the use of materials and space outdoor can implement self-directed learning.

P.5 An exploratory study of Forest School practitioners' views on the benefits of and barriers to children's participation in Forest School

Author: A. Hepworth *C.J. Edmonds

Abstract

This paper reports an exploratory study investigating Forest School practitioners' views on the benefits of and barriers to children's participation in Forest School.

Ten qualified Forest School practitioners (8 female, 2 male), took part in the study. They were asked to rate their opinion of six potential benefits and four potential barriers to children attending Forest School using Likert scales ranging from "not at all" (1) to "extremely" (5). They were also offered the opportunity to elaborate further in order that their thoughts would guide future research questions.

There was strong agreement on the benefits, with median scores of 5 for Forest School offering the "opportunity to learn through play", "raises self-esteem", "develops collaborative skills" and "engagement with nature". The two benefits related to cognitive development, "improves language skills" and "improves concentration" had slightly lower median scores (4.5).

Median scores for barriers were lower, suggesting less agreement among Forest School practitioners that the options offered negatively impacted on children's participation. The highest median score (3) was shown for "curriculum demands" and "lack of outdoor space". "Bad weather" and "parents' expectations" had a median rating of 2. There was a wide range of scores.

Quotes suggest that practitioners observe children behaving differently in the classroom and in the Forest School, in terms of self-confidence and engagement. They also reiterated the benefits and the need for more Forest School sessions, with one practitioner worrying that the Forest School ethos may be compromised in order that it fit in with mainstream education.

In conclusion, practitioners were in agreement about the benefits of Forest School participation for children on learning, self-esteem, collaboration, nature engagement, language skills and concentration. However, there was less agreement that the barrier options offered in the present study negatively impacted on children's participation.

P.6 Forest School Practice within UK Mainstream Primary Schools; Practitioners' Experience of Including Children with Autism Spectrum Disorder

Author: N. Gardiner and J.McMullen

Abstract

The Forest School (FS) approach has gained popularity among school settings across the United Kingdom (UK) and Ireland (Prince, 2019). However, how FS is being implemented is relatively unknown, and practice appears to vary across settings (Barrable & Arvanitis, 2019). In mainstream schools, the learner-led principle can become lost (Rea & Waite, 2012), potentially due to the clash between the child-led, exploratory nature of FS and curriculum and budget constraints and risk aversion within education (Whincup et al., 2023). The first phase of this study considered the potential disparity between 'real world' and 'ideal' practice. An online survey was distributed to FS practitioners across the UK exploring what FS practice looks like in mainstream primary schools, in relation to the six FS principles.

The second phase of this study explored the perceived benefits, challenges and potential adaptations needed to aid inclusion of children with autism spectrum disorder (ASD) in FS within mainstream primary schools. Following completion of the survey, practitioners who had experience of including children with ASD and whose practice aligned with the six FS principles were invited to take part in semi-structured interviews to discuss their experience in depth. This is building on previous research by Bradley & Male (2017) and Friedman et al. (2022) who explored the impact of FS for children with ASD in special school settings. It is hoped that this research will add to FS literature and inform policy and best practice for inclusion. Data collection was undertaken between January to May 2024. Results from the first phase of the research will be discussed within this poster presentation.

Nature Education Tracking Application (NETA): Enhancing Forest School Research

Presentation Summary for the World's First Academic Symposium on Forest School Research

Author: Nic Harding

Impacts of the Forest School education approach are traditionally measured in a qualitative manner, but very rarely quantitatively. Therefore, there is a significant gap in current Forest School research concerning longitudinal studies collecting quantitative information. The Nature Education Tracking Application (NETA) addresses this by enabling systematic, long-term quantitative data collection and analysis, providing valuable insights into the sustained effects of nature-based education over time.

NETA is an innovative web-based tool designed to support research in nature-based education, such as Forest School. We currently have a Minimum Viable Product (MVP) awaiting further development. NETA is poised to transform how data can be collected for research purposes. By standardising the process with a six-point Likert scale, NETA ensures easily submitted, consistent data across different studies and programmes, enhancing the overall reliability and validity of research findings.

Integrating data from multiple sources can be complex and resource-intensive. NETA simplifies this by automating the collection, compilation, scoring, and representation of data from students, parents, and educators, offering a comprehensive and cohesive understanding of programme impacts. Mass participation data are available in an anonymised linked format, allowing easy export and interrogation.

Comparing the effectiveness of various nature-based education programmes is difficult without standardised methods of data collection and analysis. NETA facilitates comparative research by linking metadata on programme setup and delivery with anonymised participant data, enabling thorough and meaningful comparisons across programmes.

We hope that NETA will provide a necessary bridge between a large population of practitioners on the ground and academics.

Benefits of NETA as an Academic Tool:

Comprehensive Data Collection and Data Triangulation:

NETA facilitates the systematic collection of observational data from multiple sources, including students, parents, and session leaders. This multi-perspective approach ensures a rich dataset that captures the diverse impacts of Forest School programmes. Data are collected at three critical points (pre-programme, mid-programme, end of programme), enabling detailed longitudinal studies that track developmental changes over time. By integrating data

from various sources, NETA provides a more holistic view of educational outcomes than has previously been possible at scale.

Automated Analysis and Visualisation:

NETA automates the scoring and visualisation of data for session leaders, fulfilling a market need to allow practitioners to advocate for their practice. Whilst massively useful in its own right, this value to leaders will encourage the generation and submission of data to a large population data repository. This simplifies the analysis process. Researchers can quickly access a clear, interrogatable data source, using individual programme setup data such as postcode, length of sessions, type of sessions, educational level, etc.

Facilitation of Mass Participation Research:

NETA's capacity to handle large datasets from various programmes supports comprehensive comparative studies. This capability is crucial for identifying trends and understanding the broad impacts of different nature-based education approaches, such as Forest School, across diverse settings and participants.

Support for Evidence-Based Policy Development:

NETA provides robust, empirical data that can contribute to research that may inform policy decisions. We hope that your early involvement can help shape the future development of this innovative tool, ensuring it meets the evolving needs of the academic community.

By addressing the critical challenges facing nature-based educators and offering significant benefits, we hope that NETA will also develop the data available for rigorous, impactful research in Forest School and nature-based education. It represents a transformative tool that not only advances academic inquiry but also supports the development of effective, evidence-based educational practices.

You can contact the FSA via email – enquiries@forestschoollassociation.org