## "Our Forest School isn't just the Trees."

## Forest Schools: Micro-Communities for Social and Emotional Development

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#### Abstract

Forest School provision is a growing phenomenon in the UK due to its perceived impact on participant learning and wellbeing. This study sought to understand the impact of Forest School provision on the social and emotional development of participants using practitioner's reflections. Semi-Structured interviews with six qualified Forest School Leaders explored practitioner experiences working with children and young people. A thematic analysis with a social-constructionist epistemology revealed three interrelated themes, which are inherent in the Forest School ethos. These themes show Forest Schools to be micro-communities constructed by participants.

The study concluded that Forest School micro-communities are established by each Forest School that is formed. These micro-communities contribute to the social and emotional development of children and young people through the construction of a shared space, fostering a sense of community and a shared power paradigm between leaders and participants.

**Key Words** – Forest School; Space; Community; Power; Social and Emotional Development; Learning; Social Constructionism

#### 1 Introduction

The growing number of Forest Schools in the UK provide participant-led outdoor learning opportunities for people of all ages (O'Brien & Murry, 2007). The process of Forest School emphasises play, preferably based in, though not limited to, a woodland environment (Forest School Association, 2018). Through the natural world, Forest School inspires learning and supports children and young people's development, including cognitive, physical, language and social-emotional growth (Sackville-Ford & Davenport (2019).

Guided by Fine and Van der Scott's (2011) definition of micro-communities, this research explores the coming together of small groups, with common interests or goals, in a shared learning environment to develop new skills and improve wellbeing through connections with others. The aims of this inquiry are to encourage further discussion among practitioners and academics regarding the community aspect of the Forest School process and its benefits to the development of children and young people.

#### **1** Forest School – Constructing a Community of Learning

#### 2 Defining Forest School

Scandinavians use the term 'Friluftsliv' (Free Air Living), rooted in the self-image of
Scandinavians as nature-loving people, closely connected with free movement and access to
nature (Gelter, 2000). Friluftsliv complements the Scandinavian approach to outdoor learning,
which inspired the UK's Forest School movement. However, the UK has no deep-rooted
philosophy to draw from which has meant the country has had to define Forest School for itself.
Murray and O'Brien (2005) highlight this helpful but limited definition:

# 9 *"Forest School is an inspirational process that offers all age's regular opportunities to* 10 *achieve and develop confidence through hands-on learning in a woodland* 11 *environment."*

Knight (2011) later identified the defining characteristics of Forest School as: being based in
an outdoor setting (not limited to a woodland), in a safe-enough environment, happening over
a period of time in all weathers, with trust essential to the process.

After consultation with Forest School Networks and practitioners across the UK, The Forest
School Association (2018) published the six key principles of Forest School:

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Forest School is a long-term process of frequent and regular sessions in a
 woodland or natural environment, rather than a one-off visit. Planning, adaptation,
 observations and reviewing are integral elements of Forest School

2. Forest School takes place in a woodland or natural wooded environment to
 support the development of a relationship between the learner and the natural world
 3. Forest School aims to promote the holistic development of all those involved,
 fostering resilient, confident, independent and creative learners

| 1  | 4. Forest School offers learners the opportunity to take supported risks appropriate                |
|----|---|
| 2  | to the environment and themselves   |
| 3  | 5. Forest School is run by qualified Forest School practitioners who continuously                   |
| 4  | maintain and develop their professional practice  |
| 5  | 6. Forest School uses a range of learner-centred processes to create a community for                |
| 6  | development and learning  |
| 7  |   |
| 8  | Whilst similar to Knight's (2011) characteristics, these principles emphasise the holistic          |
| 9  | development of Forest School participants, with the development of a community important to         |
| 10 | the learning process. It is within these characteristics and principles that Forest School offers a |
| 11 | unique opportunity for children and young people to develop socially and emotionally.               |
| 12 |   |

### 1 Constructing Forest School

Leather (2018) proposed that Forest School is socially constructed, shaped by those involved,
as individuals and collectively, by attaching unique meanings known to those within. This
constructionist lens emphasises the importance of context (Crotty 1998). As Forest School is
based within its specific context, the setting will shape the character and delivery of Forest
School, as those participating will bring their own cultural and environmental nuances,
influencing the participant-led process.

8 Cummings and Nash (2015) and Elliot (2015) bring alternative constructionist perspectives to 9 this exploration of Forest School. Cumming & Nash (2015), found that a sense of place was 10 integral to the development of children attending a Forest School in Australia; the term Forest 11 School was replaced with Bush School indicating the significance of cultural understanding 12 when constructing the Forest School concept within its environment.

Elliot's (2015) exploration of the planning and development and of a new Forest School within 13 a UK urban environment highlights the positive reception the Forest School ethos received 14 from parents and school staff. However, Elliot's study acknowledged the fears associated with 15 a risk-averse society such as that of the UK (Gill, 2008; Harper, 2017; Harper & Obee, 2020) 16 and noted concerns parents had regarding the risks of outdoor learning to children's health. 17 Elliot's paper recommended that the construction of Forest Schools include parents in order to 18 19 reduce fear and support a better understanding of outdoor learning and its benefits through involvement in the Forest School process. Like Cummings and Nash, Elliot considered Forest 20 School as something to be developed and shared communally. This is in line with the sixth 21 22 principle of the Forest School Association, emphasising community learning.

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#### **1** Democratic and Active Learning

The approaches to learning within Forest School are rooted in a democratic learning style. This 2 method of schooling is founded on a socio-constructivist perspective of education (Aasen et al, 3 2009) and encourages active participation in the learning process, which is linked to the 4 5 development of a learning community. This community creates its own meaning through 6 participation with pedagogues, fellow learners and the environment. Learning in Forest School 7 is inspired through a variety of activities, using an array of theoretical concepts not rooted in the typical UK curriculum. The Forest School Leader's role is that of a facilitator rather than a 8 9 teacher and approaches to learning take influence from theorists such as Dewey (1897), Freire (1972) and Vygotsky (1978). Dewey (1916) believed that education should be democratic and 10 child-centred, with children free to pursue their interests. He believed the outdoors could be 11 12 used to facilitate education. Freire (1972) saw students as part of the learning process and suggested the teacher should offer an introduction to the topic, allowing learners to experiment 13 and discover ideas for themselves. The outcome for Freire is the process of learning and critical 14 thinking rather than just the acquisition of knowledge. Both theorists inform the Forest School 15 approach to learning with its child-centred philosophy and hands on experiences to education 16 17 that are facilitated rather than directed. Vygotsky's (1978) zone of proximal development is 18 applied in Forest School to support participants' active engagement in learning. The Forest 19 School Leaders role is to facilitate participants learning and support them in acquiring the skills 20 initially, stretching their learning before leaving the child/young person to continue on their own. Although the Forest School approach to pedagogy lacks clarity (Coates & Pimlott-21 22 Wilson, 2019) it is agreed that its ethos allows for a flexibility in the educational process that 23 promotes engagement in education and encourages self-initiated learning. This approach to learning with less adult control has wider benefits beyond the school curriculum for children, 24

- 1 such as the development of independence, responsibility for others and applying knowledge to
- 2 other contexts (Waite, 2011).

### 1 Methodology

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This research used semi-structured interviews to collect data. The information obtained was transcribed verbatim and analysed using a Thematic approach as presented by Braun and Clarke (2006). A constructionist epistemology underpinned the researcher's examination, supporting an in-depth exploration of the experiences of Forest School Leaders. The research was approached in this manner as Forest School is argued to be a socially constructed process (Leather, 2018) and Forest School Leaders will approach Forest School based on their own experiences and the needs of each group they lead.

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#### **11 Data Collection and Sample**

Data sampling was purposeful and the sampling strategy was criterion-based. A criterion-based sampling method suited the research question; participants needed certain qualifications and experiences to answer the interview questions. The inclusion criteria were level-3 qualified Forest School Leaders, with two or more years of experience delivering Forest Schools with children and young people. The table below provides further details about the participants and their backgrounds. Participants were given pseudonyms to maintain their confidentiality.

| gth of Time Forest School Delivery |
|------------------------------------|
| Cottinue                           |
| ractice Settings                   |
| /ears Schools – Primary and        |
| Secondary, Pupil                   |
| Referral Units and is a            |
| training provider.                 |
| /ears Schools - Primary and        |
| Secondary Schools.                 |
| Training Provider.                 |
| /ears Schools - Primary and        |
| Secondary. Specialist              |
| Schools and is a                   |
| training provider.                 |
| /ears Schools - Early Years,       |
| Primary and Secondary              |
| and is a training                  |
| provider.                          |
| /ears Schools, Outdoor             |
| Education Centres and              |
| is a training provider.            |
| ears Schools - Primary and         |
| Secondary and                      |
| Outdoor Education                  |
| Centres.                           |
|                                    |

Interviewees were identified through the public register on the Forest School Associations
website. The target sample size was six to eight Forest School practitioners; following consent,
six were recruited.

#### **1 4.4 Data Collection**

Semi-Structured interviews covered the topic needed for research purposes, enabling
interviewees to elaborate or provide further information. The interviews were receptive in style.
Receptive interviews have a humanistic approach and can be considered Rogerian (Leavy,
2014), using open questions, allowing the participant to answer as broadly as they wish,
facilitating participant control. This complemented the constructionist epistemology, and
aimed to hear participant experiences, with the capacity to respond freely.

An interview schedule was developed based on the study's aims and objectives, informed by 8 9 the literature review. Following Fylan's advice (2005) to keep interview schedules brief, eight questions were developed. The first three were 'warm-up' questions to establish rapport 10 between interviewer and participant, seeking to gain an understanding of the participants own 11 12 constructs of Forest School.. The subsequent five questions focused on the impact of Forest Schools on the social and emotional development of children and young people. The interviews 13 14 lasted an hour on average, and were recorded and transcribed verbatim as soon as possible after the interview. 15

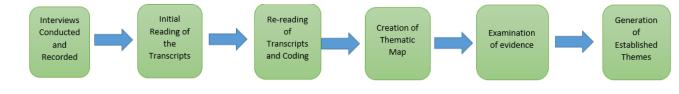
#### 1 Data Analysis

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Thematic Analysis analyses data and identifies patterns or themes which occur during research. This flexible approach adapts to a range of epistemologies, including constructionism (Braun and Clarke, 2006). Thematic Analysis is a trustworthy, confirmable method that grounds theoretical findings which can be replicated (Nowell et al, 2017). Its flexible approach to epistemologies means it was considered viable for this study because the analysis sought to identify patterns and themes in the data.

As the study was conducted by a lone researcher, Lincoln and Guba's (1985) reliability criteria
was used to limit bias, including; an audit trail; transcribing interviews verbatim to provide rich
detail for analysis; and acknowledging own bias. Whilst there is no universal agreement on
evaluating qualitative research (Noble & Smith, 2015), these strategies enabled a rigorous
study.

Analysis was conducted by immersive reading of the transcripts and generating initial codes. 14 From these codes, a thematic map was produced (Appendix, 2). The researcher identified 15 themes which were reviewed and were determined based on the evidence in the data to support 16 each theme. The researcher ensured the themes correlated with the coded extracts and fit well 17 with the whole dataset. In-depth analysis of each theme was undertaken and names provided 18 for the themes identified. To test the clarity of each theme the researcher followed Braun and 19 Clarkes (2006) advisement that a theme should be clearly described in a couple of sentences. 20 21 Once the themes were established the researcher chose vivid extracts to support these themes in the findings. Figure.1 shows the process of analysis. 22



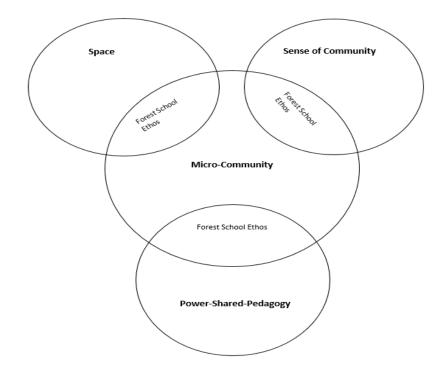
#### 2 Figure.1 Process of Analysis

The themes in this study correlated with other research completed in the area (Harris, 2017;
Kemp & Pegden, 2018; McRee, 2018) offering further insight into how these themes promote
the social and emotional development of participants engaging in the Forest School process.
The findings herein reveal the impact a Forest School Micro-Community can have on
participants.

### 8 Findings and Discussion

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Analysis identified three interconnecting themes: Space, Sense of Community and Power 10 Shared Pedagogy. Each theme had a defining set of characteristics and are considered 11 important as they appeared in the data most frequently across the six interviews. Analysis 12 showed that these themes connected, demonstrating a wider influence in Forest Schools, and 13 facilitated the creation of micro-communities which impacted on the social and emotional 14 development of Forest School participants. The themes were connected by the Forest School 15 Ethos (Figure.2) which O'Brien & Murray (2007) note is grounded in constructivist approaches 16 to learning, advocating a child-led process whereby the leader shapes the Forest School 17 sessions to the needs of the participant with socialisation and conversation integral to the 18 learning process. 19



2 Figure 2: Forest School Micro-Community - Thematic Connections

#### 4 Space – Learning beyond the formal walls of a classroom

5 Space was a reoccurring theme throughout the interviews. Although no interview questions 6 mentioned space, the theme arose in participant narratives, often central to their point. Kraft 7 (2013) argues spaces are not limited to static objects such as buildings but are dynamic, interchangeable entities that derive meaning from human interaction and construction. The 8 9 constructions within an educational space create a "learning atmosphere". With emphasis on autonomy and giving children freedom and space, Forest Schools allow participants to explore 10 their interests outside of mainstream-style learning. The quote below from Winston highlights 11 the impact autonomous use of space can have on emotional development, where freedom to 12 roam and choose activities allows for socialisation and connection. 13

"The use of green space and the fact that you're not so obviously contained in a
space. So there's a couple of kids over there, there's a kid digging on his own there

and the rest are clustered together socialising. I think that is one of the keys to
 emotional development, because you've got space to do your own thing. " (Winston)
 Holly highlights the value of Forest Schoolers having time outside of institutional learning
 and space to form connections with others and their environment.

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"It comes back to what I was saying that nature connection and caring ....there is a combination of caring for themselves, caring for each other and nature... and having the space and time to do that, they kind of become deinstitutionalised." (Holly)

8 For Holly, the space created is separate from mainstream schooling, indicating an unschooling nature to the Forest School process, where children have the freedom to connect 9 10 with others and their environment. Unschooling is considered an informal type of education 11 offering hands on experience without much adult intervention, and benefits can include development of social skills (Gray & Riley, 2013). Unschooling and Forest Schools share 12 similar thoughts on the need for space and autonomy in learning, with emphasis on learner 13 freedom and self-motivation. Petrovic and Rolstad (2017) consider unschooling to be 14 defined by the pursuit of autonomy, self-motivation and child-led learning experiences. 15

16 Both reflections above highlight differences between the space in Forest School - more open with freedom to move - than in spaces such as the classroom, which are closed with 17 limited movement. Harris (2017) explored the concept of space in Forest Schools noting 18 19 that the flexible learning environment supports child-led learning and increased engagement from those involved. This paper concurs with Harris (2017) as the data presented 20 21 demonstrates that the Space of a Forest School environment is central to the social and emotional development of participants. . It was evident that the environment afforded 22 opportunities for social and emotional growth due to the features of the surroundings and 23

the freedom to explore and interact. Lucy reflects on how the space provides opportunities
 to engage in practical and social learning.

"I worked in a couple of special schools, one that I was working in, the young people
collaborate and cooperate. Where they were struggling in school and finding it
difficult to find space for them to move to, an activity they could do... there was an
amazing freedom that meant they could sit alongside people, they could be working
on something practical, that they are giving their single attention to, and when
they're doing something, particularly boys, when they're doing something they will
talk. "(Lucy)

Supporting this reflection, Leather (in Jeffs & Ord, 2018) offers a model which interlinks
engaged experience with socio-cultural, personal and physical context that are all connected
by talk. Forest School spaces offer such opportunities for growth and learning, Lucy's above
quote provides evidence for this.

McRee et al (2018) found that the space afforded to children in Forest Schools fostered an 14 environment where participants had time to manage emotions and learn to self-regulate. The 15 16 article discussed the role of the 'physical' space and how this allowed children the freedom to explore their own interests and then discuss how conflicts during activities, such as den 17 building, affected them. Part of this was the owning of the space and choosing the affordances 18 19 to engage with. Affordances are defined in relation to the features of an environment (Clarke & Uzzell, 2005). In the "Space" theme, interviewees discussed how the Forest School 20 environment provides affordances for social development such as physical activity, space to 21 22 move from conflict or even a space where "permission" is given to reflect and regulate.

"There is something in the environment that really makes that work not just the
reflection of the physical environment but the... permission in the environment."
(Hannah)

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"One lad, found being in the woods was a coping strategy. He got all of his anger out, there is nothing better than a pile of wood to work into an anger problem. (Lucy)

6 The above quotes demonstrate that the Forest School space can be used for emotional growth, 7 regulation and physical activity, through the space offered and affordances available. The evidence in this and other studies (Harris, 2017: Waite & Goodenough, 2018: McRee et al 8 9 2018) indicates that this is due to how the space is used by participants. This paper demonstrates the value of the Forest School space, not just as a physical entity but through the meaning that 10 11 is constructed jointly by participants within the environment. Cresswell (2015) states that space 12 becomes *place* when meaning is attached to the *space*. This paper concurs with Cresswell as the evidence shows that while a variety of Forest Schools can be held in the same environment, 13 the meaning of each Forest School is constructed by the different groups and individuals 14 inhabiting the space. Therefore, as each group develops and connections are made, the *meaning* 15 of their Forest School starts to develop through shared constructions. Within this co-16 constructed space a Sense of Community is fostered by Forest School participants. 17

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#### 21 Sense of Community – Conflict, Communication and Connection

Interviewees discussed the significance of community and the development of relationshipswithin Forest School. The development of a learning community in Forest Schools is part of

1 the educational experience and a component of Forest School principles (Forest School Association, 2018). Communication was integral to the Sense of Community theme, 2 3 correlating with the importance of social-connectedness. Social-Connectedness is commonly 4 agreed as a person's sense of belonging to others and institutions, which improves wellbeing over time (Jose et al, 2012, Lamblin et al, 2017). This study agrees that social-connectedness 5 6 builds wellbeing through connections with others and that Forest Schools provide opportunities for social-connectedness. Harry's reflection demonstrates how social-connection is fostered 7 within Forest Schools. 8

9 "She said my favourite time of the week is when we have a hot chocolate because that's
10 when we sit and we are calm. And in the rest of my week this is the only time I get to be
11 calm and when I'm ever stressed I think about me having a hot chocolate with my
12 friends." (Harry)

Harry's recall shows the value of regularly sitting with others in a group, sharing an interest or 13 activity and a moment of calm. The young person's comments demonstrate the lasting power 14 these moments can have. Pryor et al (2005) postulated on the socio-ecological benefits of 15 outdoor experiences, concluding that time outdoors in small groups supports wellbeing and 16 that connection to others is a key component of the therapeutic process of outdoor experiences. 17 This study's findings mirror such emphasis on the benefits of building a community and 18 fostering connection with others. The following comments highlight the significance of 19 community building in Forest School. 20

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"It has to take place in a wooded area really, rather than just a corner of the school field. You have to build community and you have to build a love of nature and the natural world." (Holly)

"It's about recognising the value in each person, so then what you are doing together
is building a learning community. It is about learning to communicate with each other,
it's about connecting with each other and with nature and care for nature. So it's about
connecting to your own emotions, connecting to other peoples and, connecting to
nature." (Lucy)

6 However, community building is not without difficulty and Hannah discusses the value of7 having to communicate, manage conflict, and find solutions without adult intervention.

"I think actually one of the things I'm interested in is how people work things out for
themselves if someone isn't doing it for them. The social benefits of that and children
being able to organise and choose and struggle and have to reset and all of those things
with support, but not with someone who is a fixer. I think that's a really interesting
approach and for me a lot of the social benefits come from having that freedom."
(Hannah)

By engaging in conflict, children learn the skills to work well with others. Jensen-Campbell et 14 al (2003) examined the importance of conflict in early childhood, concluding that constructive 15 16 conflict promotes pro-social behaviours and increased self-regulation. The evidence in this study demonstrates that Forest Schools provide space for social and emotional development, 17 through the use of a community building environment. By entering an environment where 18 19 competition for resources is high, democratic interaction is encouraged, with space to engage in critical dialogue, participants can learn, develop or improve the skills necessary to navigate 20 social nuances. 21

22 23 "Yes, their social status in that cohort is up. And forest school is the only place you will see some of them work with anybody else." (Daniella)

1 The focus on fostering community and connectedness supports participants social and emotional development through; negotiation of resources; learning to manage conflict with 2 3 limited adult intervention; forming relationships beyond the classroom; discussing thoughts 4 and feelings. The experiences discussed above lead to a Sense of Community, which is important for development and is integral to wellbeing (Pretty et al, 2006). Peacock & Pratt 5 (2011) suggest that communities can be considered within their particular situation rather than 6 representative of a whole ideal. In this study the evidence indicates that the strength of a Forest 7 School community is also situational and lies in the practices, constructs and agreed upon 8 9 norms created by participants. The findings show that Forest School communities are constructed by the individuals in each group and there are psychosocial benefits to this. 10 Cicoganai et al (2015) agree that when children and young people participate in community 11 12 and extracurricular activities in school, there is an increase in their social, emotional and psychological wellbeing. Yet, what enables the sense of community to build is how power is 13 distributed within the Forest School. 14

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#### A Power Shared Pedagogy – The Power of letting go of Control

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The concept of power was frequently discussed in relation to the child-led approach of Forest School practitioners. The Forest School learning approach contrasts with the UK's standard teaching style, which Leather (2018) argues is rooted in Victorian values i.e. the teacher in control of the learning process. Forest School adopts a shared learning process with the leader learning alongside students, requiring trust between participants and leaders.

22 Lucy encapsulates this approach to education.

| 1 | "If you as an adult are sitting on the ground in your waterproofs and you're poking the |
|---|---|
| 2 | ground with the stick, you are wholly available and on their level and there is no      |
| 3 | hierarchy."(Lucy)   |

Magraw and Dimmock (2006) found that the key to working with children outdoors was
establishing an equal relationship, allowing children to direct their learning, model positive
behaviour, and be led by process not outcome. The data in this study showed Forest School
Leaders were consciously sharing power within Forest School which included opportunities
for children to take the lead and teach others.

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"Part of our job is to support, rather than tell them what we know." (Daniela)

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"We had one boy, learned how to do square lashing and felt great and then I said "can you go and show this person how to do it?" And he felt like king of the world". (Harry)

This type of effect featured in Tiplady's (2018) research on the impact Forest Schools have on 13 14 emotional development. Tiplady noticed, when staff start to withdraw, children interact more with their peers through shared learning, and expand communication skills. Tiplady & Menter 15 16 (2021) concluded that such a learner led pedagogy was critical to children and young people's wellbeing. Angelides and Avraamidou (2010), found that alternative and informal learning 17 environments (to the classroom), promoted equal social relationships where students could 18 lead, be led, and experience learning rooted in everyday scenarios. This approach offers 19 opportunities for connection between student and pedagogue. By changing the power 20 21 paradigms, learners and facilitators engage in new ways of pedagogy, promoting congruence and trust. Facilitators act as role models, demonstrating how to express themselves. 22

23 "...good modelling, it's something I teach (others) when I do the Forest School training
24 because it's actually... if you think about it... we don't as adults model." (Holly)

"Actually nobody admits to those children "you know what, sometimes I feel shit,
 sometimes I really feel sad and want to cry." And you can see their heads nodding."
 (Daniela)

4 "And that congruence is effective because the position you are in, you are giving
5 yourself permission to be much more honest and actually a lot of teachers can't do that
6 because it's being vulnerable and it's quite hard to give power away when that's the
7 dynamic isn't it?" (Hannah)

8 Eloquin & Hutchinson (in Knight, 2011), concur with the evidence of this research. 9 For these practitioners, role modelling can lead to increased self-awareness and improved self-10 regulation. For Kemp & Pegden (2018), the Forest School focus on socialisation makes the 11 hidden curriculum (socialisation) explicit, with its emphasis on child-led learning and 12 pedagogic approach, encouraging self-directed learning and self-awareness. Power sharing in 13 the learning and taking a facilitating role in the educational process enables such social-14 development.

#### 1 Conclusion

This study explored the impact Forest School has on the social and emotional development of
children and young people. Through practitioner perspectives, it has highlighted key themes
that work cohesively to help participants and facilitators form Forest School microcommunities.

Each Forest School micro-community is different, as each is constructed by individual groups
engaging in Forest Schools. Through the approach taken by facilitators, the outdoor
environment provides opportunities for development through the use of *Space*, via fostering a *Sense of Community*, and a *Power Shared Pedagogy*. The co-created environment allows
participants to explore their own interests, increasing confidence, self-esteem, developing
physically, socially, emotionally and cognitively.

The study design was exploratory, seeking to understand individual experiences and therefore cannot not be generalised across any group. Encouragingly, the findings in this research mirror other studies in the field, sharing commonalities such as the importance of space and the benefits of educative experiences beyond the formal environment of the classroom.

Despite the limitations, this research, whilst small scale, is unique and offers a new view of Forest School as a community process. Therefore, the study provides new insights into children and young people's wellbeing and development using Forest School, adding to the current knowledge base. Further research is needed to continue exploring the benefits of Forest School Micro-Communities and the impact these have on participants of Forest Schools.

## 1 **References**

| 2  | 1. | Aasen, W. Grindheim, L.T & Waters, J. (2009). The outdoor environment as a site    |
|----|----|--|
| 3  |    | for children's participation, meaning-making and democratic learning: examples     |
| 4  |    | from Norwegian kindergartens. Education 3-13, 37:1, 5-13, DOI:                     |
| 5  |    | 10.1080/03004270802291749  |
| 6  | 2. | Angelides, P & Avraamidou, L. (2010). Teaching in informal learning environments   |
| 7  |    | as a means for promoting inclusive education. Education, Knowledge and Economy.    |
| 8  |    | Vol. 4(10). Taylor and Francis Online. https://doi.org/10.1080/17496891003708168   |
| 9  | 3. | Braun, V and Clarke, V. (2006). Using thematic analysis in psychology. Qualitative |
| 10 |    | Research in Psychology, 3 (2). pp. 77-101. Qualitative Research in Psychology is   |
| 11 |    | available online at:   |
| 12 |    | http://www.informaworld.com/smpp/content~db=all~content=a795127197~frm=titlel      |
| 13 |    | <u>ink</u> .   |
| 14 | 4. | Cicoganai, E, Mazzoni, D, Albanesi, C & Zani, B. (2015). Sense of Community and    |
| 15 |    | Empowerment Among YoungPeople: Understanding Pathways from                         |
| 16 |    | CivicParticipation to Social Well-Being. International Society for Third Sector    |
| 17 |    | Research. 26:24-44. DOI 10.1007/s11266-014-9481-y                                  |
| 18 | 5. | Clarke, C & Uzzell, D.L. (2005). The socio-environmental affordances of            |
| 19 |    | adolescents' environemnts: In Spencer, C & Blades, M. (2005). Children and their   |
| 20 |    | Environments: Learning, Using and Designing Spaces. Cambridge University Press:    |
| 21 |    | New York.  |
| 22 | 6. | Cresswell, T. (2015). Place An Introduction. Wiley Blackwell Publishing. West      |
| 23 |    | Sussex.  |
| 24 | 7. | Crotty, M 1998, The foundations of social research, Allen and Unwin, Sydney        |

| 1  | 8. Cumming, F & Nash, M. (2015). An Australian perspective of a forest school:           |
|----|--|
| 2  | shaping a sense of place to support learning. Journal of Adventure Education and         |
| 3  | Outdoor Learning. 15:4. 296 – 309. Routledge. DOI:                                       |
| 4  | 10.1080/14729679.2015.1010071  |
| 5  | 9. Dewey, J. (1897). 'My Pedagogic Creed', in Dewey, J. (1940). Education Today.         |
| 6  | New York: Greenwood Press.   |
| 7  | 10. Elliot, H. (2014). Forest School in an inner city? Making the impossible, possible.  |
| 8  | Education 3-13, 43(6), 722 – 730. DOI: 10.1080/03004279.2013.872159                      |
| 9  | 11. Eloquin & Hutchinson (2011) In Knight (2011) Forest School for all. London. Sage.    |
| 10 | 12. Fine, G.A & L, van der Scott. (2011). Wispy Communities: Transient Gatherings and    |
| 11 | Imagined Micro-Communities. American Behavioural Scientist. 55(10). 1319-1335            |
| 12 | Sage Publications. DOI: 10.1177/0002764211409379   |
| 13 | 13. Forest School Association. (2018). What is Forest School?                            |
| 14 | https://www.forestschoolassociation.org/what-is-forest-school/ (Last Accessed,           |
| 15 | 17.10.18)  |
| 16 | 14. Freire, P. (1972). Pedagogy of the oppressed. Harmondsworth: Penguin.                |
| 17 | 15. Fylan, F. (2005). 'Semi-Structured Interviewing' in Miles, J & Gilbert, P. (2005). A |
| 18 | Handbook of Research Methods for Clinical Health and Psychology. Oxford                  |
| 19 | University Press. Oxford.  |
| 20 | 16. Gelter, H. (2000). Friluftsliv: The Scandinavian Philosophy of Outdoor Life.         |
| 21 | Canadian Journal of Environmental Education. Vol. 5(1). Public Knowledge.                |
| 22 | 17. Gibson, J.J. (1977). The theory of affordances. In R. Shaw and J. Bransford (Eds),   |
| 23 | Perciving, acting, and knowing (pp. 67-82). Hillsdale. New Jersey. Erlbaum.              |
| 24 | 18. Gill, T (2007). No Fear. Growing up in a risk averse society. Calouste Gulbenkian    |
| 25 | Foundation, London.  |
|    |  |

| 1  | 19. Gray, P, & Riley, G. (2013). The challenges and benefits of unschooling according to     |
|----|--|
| 2  | 232 families who have chosen that route. Journal of Unschooling and Alternative              |
| 3  | Learning, 7(14), 1-27.   |
| 4  | 20. Harris, F. (2017). The nature of learning at forest school: practitioners' perspectives. |
| 5  | <i>Education 3 – 13</i> . Vol. 45, No. 2, pp. 272 – 291, DOI:                                |
| 6  | https://doi.org/10.1080/03004279.2015.1078833  |
| 7  | 21. Harper, N.J. (2017). Outdoor risky play and healthy child development in the shadow      |
| 8  | of the "risk society": A forest and nature school perspective. Child & Youth Services,       |
| 9  | DOI: 10.1080/0145935X.2017.1412825   |
| 10 | 22. Harper, N.J. & Obee, P. (2020). Articulating outdoor risky play in early childhood       |
| 11 | education: voices of forest and nature school practitioners. Journal of Adventure            |
| 12 | Education and Outdoor Learning. https://doi.org/10.1080/14729679.2020.1784766                |
| 13 | 23. Jeffs, T & Ord, J. (2018). Rethinking Outdoor, Experiental and Informal Education:       |
| 14 | Beyond the Confines. Routledge. Oxon.  |
| 15 | 24. Jensen-Campbell, L.A, Gleason, K.A, Adams, R & Malcolm, K.T. (2003).                     |
| 16 | Interpersonal Conflict, Agreeableness, and Personality Development. Journal of               |
| 17 | Personality. 71(6), 1059 – 1086. Blackwell Publishing.                                       |
| 18 | 25. Jose, P.E, Ryan, N & Pryor, J. (2012). Does Social Connectedness Promote a Greater       |
| 19 | Sense of Well-Being in Adolescents Over Time? Journal of Research on Adolescents.            |
| 20 | 22(2). 235 – 251. Society for Research on Adolescents. DOI: 10.1111/j.1532-                  |
| 21 | 7795.2012.00783.x  |
| 22 | 26. Kemp, N & Pagden, A. (2018). The place of forest school within English Primary           |
| 23 | Schools: Senior Leader Perspectives. Education 3 – 13. DOI:                                  |
| 24 | 10.1080/03004279.2018.1499791  |
| 25 | 27. Knight, S. (2011). Forest School for All. Sage. London.                                  |

| 1  | 28. Kraftl, P. (2013). Geographies of Alternative Education: Diverse learning spaces for    |
|----|---|
| 2  | children and young people. Policy Press. Bristol.   |
| 3  | 29. Lamblin, M, Murawski, C, Whittle, S & Fornito, A. (2017). Social connectedness,         |
| 4  | mental health and the adolescent brain. Neuroscience and Behavioural Reviews. No.           |
| 5  | 80. 57 - 68. Elsevier. https://doi.org/10.1016/j.neubiorev.2017.05.010                      |
| 6  | 30. Leather, M. (2018). A critique of Forest School: something lost in translation. Journal |
| 7  | of Outdoor Education. Vol:21. Issue.1. pp. 5 – 18. Springer.                                |
| 8  | https://doi.org/10.1007/s42322-017-0006-1   |
| 9  | 31. Leavy, P. (2014) The Oxford Handbook of Qualitative Research. Oxford University         |
| 10 | Press. New York.  |
| 11 | 32. Lincoln, YS. & Guba, EG. (1985). Naturalistic Inquiry. Newbury Park, CA: Sage           |
| 12 | Publications.   |
| 13 | 33. Magraw, L & Dimmock, I. (2006). Silence and presence: How adult attitude effects        |
| 14 | the creativity of children. National teacher research panel                                 |
| 15 | 34. McCree, M, Cutting, R., Sherwin, D., (2018). The Hare and the Tortoise go to Forest     |
| 16 | School: Taking the scenic route to academic attainment via emotional wellbeing              |
| 17 | outdoors. Early Child Development and Care, 188(7), 980-996. DOI:                           |
| 18 | http://dx.doi.org/10.1080/03004430.2018.1446430   |
| 19 | 35. Murry, R. & O'Brien, L. (2005). Such enthusiasm – a joy to see: an evaluation of        |
| 20 | Forest School in England. Report to the Forestry Commission. Available at:                  |
| 21 | www.Forestresearch.gov.uk Last Accessed 08.06.20)   |
| 22 | 36. Noble H, & Smith J. (2015). Issues of validity and reliability in qualitative research. |
| 23 | Evid Based Nurs. Apr;18(2):34-5. doi: 10.1136/eb-2015-102054. Epub 2015 Feb 4.              |
| 24 | PMID: 25653237.   |

| 1  | 37. Nowell, L.S, Norris, J.M, White, D.E and Moules, N.J. (2017). Thematic Analysis:    |
|----|---|
| 2  | Striving to Meet the Trustworthiness Criteria. International Journal Of Qualitative     |
| 3  | Methods. Vol: 16 – 1 – 13. DOI: 10.1177/1609406917733847. Sage Publications.            |
| 4  | 38. O'Brien, L. & Murry, R. (2007). Forest School and its impacts on young children:    |
| 5  | Case Studies in Britain. Urban Forestry and Urban Greening. Vol. 6. Pp. 249 – 265.      |
| 6  | Elsevier. doi:10.1016/j.ufug.2007.03.006  |
| 7  | 39. Peacock, A., Pratt, N. (2011). How young people respond to learning spaces outside  |
| 8  | school: A sociocultural perspective. Learning Environ Res 14, 11–24                     |
| 9  | https://doi.org/10.1007/s10984-011-9081-3   |
| 10 | 40. Petrovic, J. E. and Rolstad, K. (2017). 'Educating for autonomy: Reading Rousseau   |
| 11 | and Freire toward a philosophy of unschooling', Policy Futures in Education, 15(7-      |
| 12 | 8), pp. 817–833. doi: <u>10.1177/1478210316681204</u> .                                 |
| 13 | 41. Pretty, G, Bishop, B, Fisher, A & Sonn, C. (2006). Psychological sense of community |
| 14 | and its relevance to wellbeing and everyday life in Australia. The Australian           |
| 15 | Psychological Society ltd.  |
| 16 | 42. Pryor, A., Carpenter, C. & Townsend, M. (2005). Outdoor education and bush          |
| 17 | adventure therapy: A socio-ecological approach to health and wellbeing. Journal of      |
| 18 | Outdoor and Environmental Education 9, 3–13 (2005).                                     |
| 19 | https://doi.org/10.1007/BF03400807  |
| 20 | 43. Sackville-Ford, M & Dvaenport, H. (2019). Critical Issues in Forest Schools.        |
| 21 | London. Sage.   |
| 22 | 44. Tiplady, L. (2018). Impacting on young people's emotional wellbeing through Forest  |
| 23 | School: The Breeze Project, pilot year. Research Centre for Learning and Teaching,      |
| 24 | Newcastle University.   |

| 1  | 45. Tiplady, L & Menter, H. (2020). Forest School for wellbeing: an environment in       |
|----|--|
| 2  | which young people can 'take what they need'. Journal of Adventure Education and         |
| 3  | Outdoor Learning, DOI: 10.1080/14729679.2020.1730206                                     |
| 4  | 46. Vygotsky, L. S. (1978). Mind in Society: the Development of Higher Psychological     |
| 5  | Processes. Cambridge, MA: Harvard University Press.                                      |
| 6  | 47. Waite, S. (2011). Teaching and learning outside the classroom: personal values,      |
| 7  | alternative pedagogies and standards. Education 3–13, 39:1, 65-82, DOI:                  |
| 8  | 10.1080/03004270903206141  |
| 9  | 48. Waite, S., Goodenough, A., (2018). What is different about Forest School? Creating a |
| 10 | space for an alternative pedagogy. Journal of Outdoor and Environmental Education,       |
| 11 | 21(1), 25-44.  |
| 12 |  |

| 1                                       | Appendices   |
|---|--|
| 2                                       | Appendix 1: Interview Questions  |
| 3                                       | INTERVIEW SCHEDULE   |
| 4                                       |  |
| 5<br>6<br>7<br>8<br>9<br>10<br>11<br>12 | <ul> <li>Demographic questions – Questionnaire. Before taking part, potential participants will be asked to provide basic information to determine their eligibility. These questions include: Are you a qualified forest school worker? Do you hold a level 3 qualification? Do you have at least 2 years of post-qualifying experience?</li> <li>Some additional information will be gathered to provide context for the data including: How many forest schools have you been and or are currently involved with? Then demographic information will be collected including: Age and Gender</li> </ul> |
| 13                                      |  |
| 14<br>15                                | 1. What inspired you to become a forest school practitioner?   |
| 16<br>17                                | 2. Can you explain what forest school is to you?   |
| 18<br>19                                | 3. What do you think is the impact of forest school on children?   |
| 20<br>21<br>22                          | 4. 4b Can you describe what you think the impact of forest school is on children's social skills or social development?  |
| 23                                      | 4bi. Could you provide examples where a child has gained social skills at forest school?   |
| 24<br>25<br>26<br>27                    | 5. Could you provide examples where a child has gained emotional skills at forest school?  |
| 28<br>29                                | 5b. Can you describe what you think the impact of forest school is on children's emotional skills or emotional development?  |
| 30<br>31<br>32                          | 6. Do you think that forest-school requires risk-taking, and if so, how does that impact on children's development?  |
| 33                                      |  |
| 34                                      | 7. What impact do you think forest school has on children's general wellbeing?   |
| 35                                      |  |
| 36                                      |  |
| 37                                      | 8. What role can forest school play in the education of children in the future?  |
| 38                                      |  |

#### Appendix 2: Initial Thematic Map

