

# **Access to Nature Project**

**Initial Report for the Froebel Trust 21.1.2022**

**Early Education Research Team**

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# Methodology Overview

## The Research Design

This was a small-scale mixed methods study including early years educator and parent focus groups; a small group activity with children; and early years educator and parent questionnaires as methods of collecting data.

## Participants

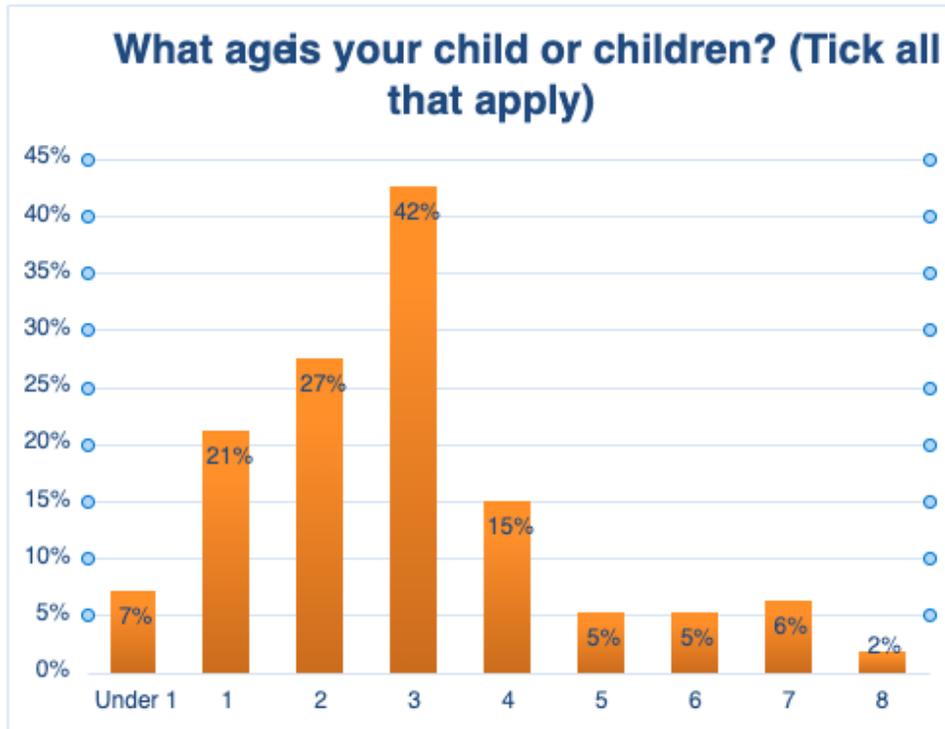
### a. The Children

A total of 12 three-year-old children across two nursery settings in the north-east of England participated in the research, 6 children from a PVI setting in a university city, and 6 from a LA setting located in a market town. Children were invited to tell the researcher where they liked best to be outside, and why. Photographs captured their responses, alongside recorded dialogue.

### b. The Parents

A total of 6 parent focus groups took place across a range of settings drawn from the north-east of England, London, and the south-east of England. 18 parents in total were interviewed as part of the groups. One of the 6 settings where the parent interviews took place did not have access to outdoor space. In addition, 96 parents completed the parent questionnaire, where the mean age of respondents' children was 3 years' old (see Table 1). All respondents' children had access to outdoor space at their early years setting.

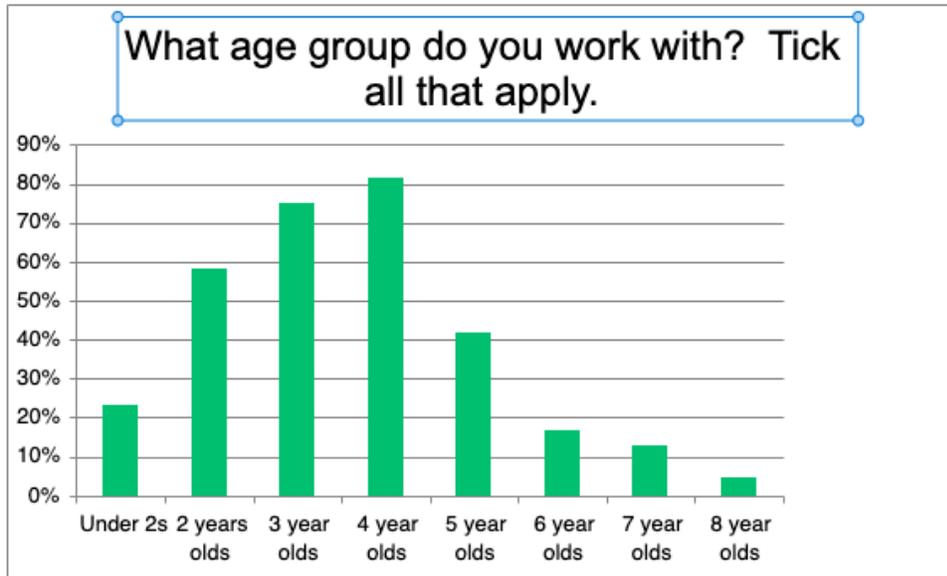
Table 1: Age of Parent Questionnaire Respondents' Children



### c. The Early Years Educators

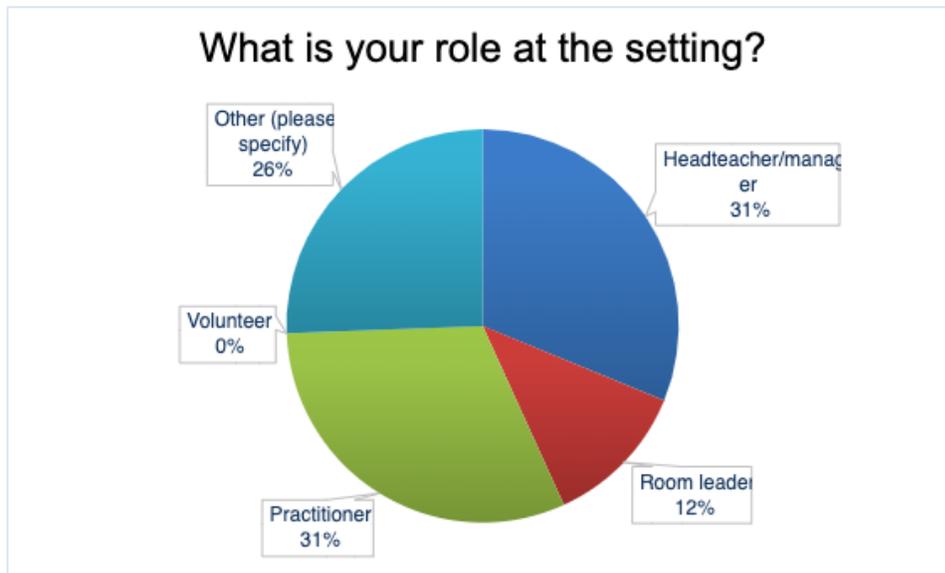
A total of 51 early years educators from across the settings took part in focus groups. All the settings involved had access to their own outdoor space. This was the same for both questionnaire and focus group respondents, where all settings under discussion also had access to their own outdoor space. 125 early years educators completed the practitioner questionnaire, the majority of whom worked with children aged between 0 and 5 years old (see Table 2).

Table 2: Ages of Children taught by Questionnaire Respondent Early Years Educators



A cross-section of early years educators filling various roles across the settings responded to the questionnaire (see Table 3).

Table 3: Early Years Educator Roles



## The Settings

Attempts were made by the research team to reach as representative a cross-section of the population as possible in terms of location, to include both densely populated city areas to rural settings (see Table 4). The members of the research team responsible for collecting data involved settings from across the north-east of England, London, and the south-east of England.

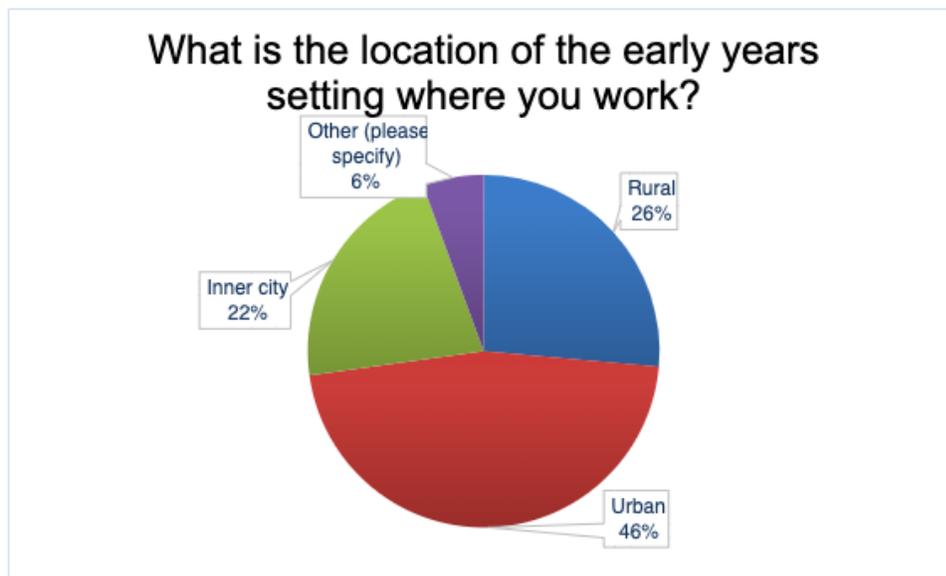
*Table 4: Participant Settings*

<b>Area</b>	<b>Type of Setting</b>	<b>Age Range of Children</b>	<b>Data Collected</b>
Inner city London	Nursery School and Childrens' Centre	0-5 years	Staff focus group (n =10)  Parent focus group (n = 1)
Inner city London	Children's Centre	0-5 years	Parent focus group (n = 3)  Interview with gardening club lead (n = 1)
Docklands, London	Academy school	3-11 years	Staff focus group (n = 6)
South-east England	Special school for autistic children	4-19	Staff focus group (n = 3)
South-east England	Maintained nursery school with strong Froebel links	0-3 years	Staff focus group (n = 3)
Tower Hamlets Nursery School	Maintained nursery school	0-4 years	Staff focus group (n = 5)

PVI Nursery	North-east of England university city	0-4 years	Small group activity with children (n = 6) Staff focus group (n = 6)
Infant and Nursery School	Market town on the outskirts of city in north-east England	3-7 years	Staff focus group (n = 17) Parent focus group (n = 4)
Maintained Nursery School	North-east of England borough	2-4 years	Staff focus group (n = 6) Parent focus group (n = 2)
Maintained Nursery School	North-east of England city housing estate	2-4 years	Staff focus group (n = 8) Parent focus group (n = 2)
Maintained Nursery School	North-east of England market town	2-4 years	Small group activity with children (n = 6)
Baby and toddler group	Based in a rural church hall in the north-east of England with no outdoor provision at setting	0-4 years	Parent focus group (n = 6)

Participants were additionally gathered from across the breadth of the country by means of parent and practitioner questionnaires. Table 5 below shows the range of locations from where respondent Early Years Educators were based.

Table 5: The Range of Respondent Early Years Educator Locations



### Data Collection Methods

Data collection methods were as follows:

1. Parent questionnaires and focus groups
2. Practitioner questionnaires and focus groups
3. Small group activity with individual participant children

The questionnaires focused on access to nature, aiming to gather views from as large a population of practitioners and parents as possible, and were followed up by focused group activities and pupil voice tasks. Focus groups collated data on approaches to taking children into nature, including the impact of Covid-19.

### Ethical Issues

Consent forms were signed by all adults involved, including the children. Because of their early age, ongoing assent was additionally sought from the children throughout the small group activity process.

### Data Analysis

A quantitative and qualitative set of data were produced, although the parent and practitioner questionnaires did allow space for further expansion to some of the questions. A thematic approach was taken with the qualitative data, and those findings were then compared with and against quantitative outcomes. They are set out jointly in the Findings section of this report.



# Findings

## Research Questions

Four research questions framed the data collection for the study:

### **1. How should access to nature be defined?**

This first research question aimed to include the perceptions of all stakeholders involved:

- a. Children's perceptions
- b. Parents' perceptions
- c. Early years educator perceptions

### **2. Is young families' access to nature similar for all?**

The research team looked at what resources were available to families.

### **3. Is young families' access to nature being enabled both at home and in the early years setting?**

The research team wanted to understand what factors enabled young families' access to nature, and also what constituted effective early years practice.

### **4. Has Covid had an impact on children and their engagement with the outdoor environment?**

The research team investigated young families' and setting experiences of the ongoing pandemic, and any ensuing impact on attitudes to being outdoors, either positive or negative.

Data from research questions 2, 3, and 4 has been analysed from the perspectives of the parents, and the early years educators.

## RQ1: Defining access to Nature

### Children's Perceptions

The children's perceptions of access to nature focused on activities undertaken outdoors, both at home and in their early years setting. 11 out of 12 of the children had access to a garden at home. Whilst the children did not play exclusively on play equipment when outside in their gardens, the following types of resources were mentioned (see Table 6):

Table 6: Types of Play Equipment accessed at Home

Type of play equipment	Number of children
Swing set	2
Slide	4
Paddling pool	2
Bubble machine (at grandparents' home)	1
Trampoline	1
Football	2

All the children liked to be outdoors with someone else. They talked about having siblings and peers to play with. One family owned a dog, who would come out into the garden with the child. There was thus a social aspect to being outdoors; it was not seen as a solitary experience, nor was it necessarily about observing, but about interacting with others (playing), and mostly using play equipment. One of the children mentioned that there were no toys in their grandparents' garden, just a bubble machine. Family involvement in being outdoors was mentioned by 3 of the children; one child talked about sleeping out in the garden overnight in a tent, another about outdoor trips with Grandma and Grandad, for example to a museum, and a third talked about planting seeds in Grandma's garden and watching the seeds grow over time. For this child participant, there was an element of investigation involved:

Sometimes I do planting in Grandma's garden. I plant seeds. They grow. One day we found a tiny rock from an avocado and planted it. It's growed [sic] a little.

One of the children talked about being away from home overnight to visit a petting farm:

We went to a hotel and it had a big TV. We ate snacks outside. I went to the petting farm – alpacas and some little piglets. We couldn't touch the piglets; it was a little window to look through. There were rabbits but we couldn't feed them. We could feed the alpacas with our hand out – it was tickly.

For one child, being outdoors at home was a daily occurrence:

Every day we do things [at home].

However, for another child the weather proved a barrier:

When it's raining, we go inside. I like snow.

Other outdoor activities mentioned were the seaside, museums, a cathedral art installation, river walks, having access to a farm, being in the woods, and going to the park with parents, siblings, and friends.

The concept of having space and freedom outdoors was important to the children, particularly in relation to the outdoor space at their respective settings:

Grass, leaves. Run around.

Mud kitchen, waterproofs on, like messy.

I like getting sticky. I put water in and mix with soil. I like the mixing bowls.

At the same time, the children talked about outdoor activities as being purposeful:

Mud kitchen. We make pies in it – strawberry pies.

Favourite outdoor activities across both settings were based on opportunities to exercise, develop, and use fine and gross motor skills, including running and jumping. 2 children mentioned kicking footballs (into skittles). At the PVI setting, all 6 children mentioned the mud kitchen; indeed, all included a photograph of the mud kitchen as part of their interview.

Whilst 9 out of 12 children took photographs of play equipment outdoors at their setting when asked where their favourite place to be outside was, 3 of the children across both settings described interactions with the natural habitat around them.

## Child 1

Play there [points to woodland area of nursery]. Bird table. Look bugs.



## Child 2

Climb on the stile. Catching worms in woodland. Find worms under the logs. Not to hurt our legs on brambles.



Other photographs taken by Child 2 also focused on what might be termed aspects of nature. Three examples are shown below:

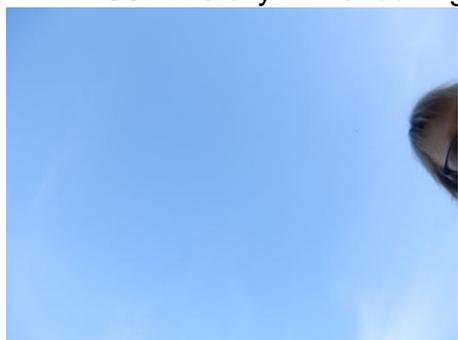




### Child 3

R: Tell me why this is your favourite place to be outside...

C3: The sky. I like looking at the clouds.



Similar to Child 2, additional photographs taken by Child 3 also focused on aspects of nature. Again, three examples are shown below:





Child 2 and Child 3 did not take photographs of any specific play equipment at their respective settings.

Finally, the knowledge and influence of adults in the children's lives from parents and grandparents was also a factor to emerge in children's experiences and perceptions of what happens outdoors:

We slept in a tent at our house, in the back. It was dark and a campfire with marshmallows.

At night I see moon and stars. Daddy has binoculars to look.

Dad has a sit-on lawnmower. We have another greenhouse with tomatoes in. We put seeds in.

I go to grandma and grandad's. Their garden has no toys. I just run around or pop bubbles from the bubble machine.

I have a trampoline and sometimes Mummy and Daddy go on. I feel like a butterfly when I jump on it.

### Summary Comments

The children's perceptions of access to nature centred on play resources available to them both at home and in their early years setting. Being outdoors was always about being active, and engaging in activities to support the development of both fine and gross motor skills. It also included a social aspect, or companionship, particularly playing with siblings in the back garden at home. Three of the twelve participants perceived being outdoors as being involved in specific nature activity, although for one of these children being outdoors was also about playing with toys. Key adults in the children's lives, including parents and grandparents, had an impact on the types of experiences children were exposed to outdoors.

## Parent Perceptions

The parents' perceptions of access to nature included the following outside places and spaces: nature reserves, open play parks and grounds, any green space, walks, National Trust places, having a garden, going to the woods or a river, and going to the beach. All the parents who filled in the questionnaire answered yes to the question, "Does your child enjoy being outdoors in nature?" 99% stated that they enjoyed being outdoors in nature with their children. Only one parent out of the 96 respondents stated that they did not like to go outside, but did not give a reason for this. 95% of parents felt that their child or children enjoyed being outdoors at their early years setting.

## Early Years Educator Perceptions

One set of responses amongst this stakeholder group centred on a clear definition of the term 'access to nature':

Access to nature is about being outside, looking at the environment around you.

Using nature's resources, what's around us, accessing all the nature around us.

A lot of our activities based outside I would say involve having access to nature...We've got a lot of bugs in our garden actually so we have done quite a bit of mini beast spotting in our garden recently, spiders, ladybirds, snails and things like that. And then talking to the children about it afterwards and then maybe planning an activity around the things that we've seen in our garden

However, for early years educators, defining access to nature was typically described in the context of what the setting could offer the children in their care in terms of outdoor experiences:

The nature environment, what's outside in terms of animals, snails and slugs, doing things like planting, getting your hands dirty touching soil, as well as the physical aspect, developing physically the gross motor skills. That's what I see it as.

Well children for example do gardening, so I would say that's access to nature. They do also forest school activities.

Freedom, free-flow of the garden, access open area.

It's really important that we have that environment accessible at all times for our children, regardless of the weather... they need to experience the different seasonal changes.

We take the children out of nursery to learn in other environments. We go out for forest school and beach school. We garden here but we also go out to the allotment.

Early years educators were asked to describe the characteristics of, and resources available for, the outdoor space at their settings (see Tables 7 and 8):

Table 7: Characteristics of the Outdoor Space at Settings

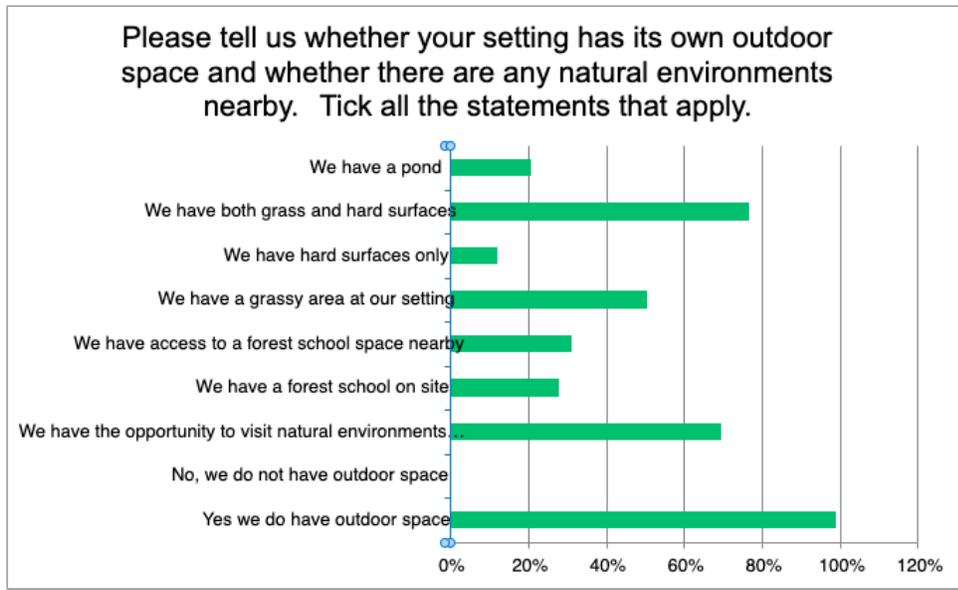
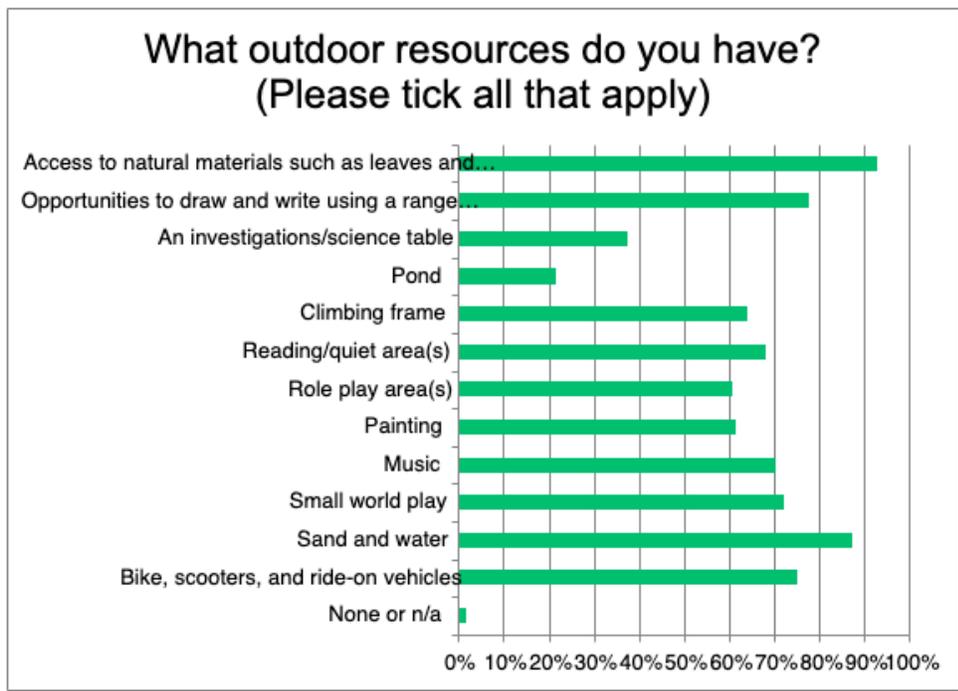


Table 8: The Range of Outdoor Resources Available



Some focus group responses centred on the responsibility of the setting to ensure children had access to nature, because they did not have it at home:

A lot of families don't have gardens and it is important to let those children access nature.

Yes, that's right because for some of the children their only access to it is through nursery. They get in the car come to nursery and back in the car to go straight home. They might not have access to it, so it is important that we do it at nursery – to make sure they are getting that little bit.

Finally, there was a comment regarding the need for the integration of outdoor learning so that it was part of the National Curriculum to support the 'how to' for teachers, whereas this was not problematic for those working at dedicated early years settings:

I think it [outdoor learning] needs to be in the curriculum, because I find it really hard when they do outdoor learning work and they say, and now you need to go outside, it kind of puts the pressure on the teachers to always be planning the outdoor activities, which obviously we should be. But I think if it was written into the curriculum as well that one lesson a week had to be outside, or this term's science lessons are all going to be outdoors based, something like that, I think it puts less pressure on teachers to have to think, this is outdoor learning week so I somehow need to fit my maths around outdoor learning.

In contrast, free-flow access to the outdoors was a core feature of the early years settings.

### Summary Comments

Defining access to nature across parents and early years educators, revealed a juxtaposition between perceptions. Parents talked about gardens and being outdoors with their children in a range of spaces and places, whereas early years educators' responses tended to focus on what the setting could offer children in terms of what they perceived as vital or important outdoor experiences. Some early years educators clearly felt that part of their role was necessarily filling a perceived gap. There was also a concern about being outdoors for outdoors' sake; it needed to be purposeful rather than 'contrived'. Of note is the high percentage number of settings which offered access to natural materials. This includes sand and water in addition to leaves and trees, as shown in Table 8.

## RQ2: Is young families' access to nature similar for all?

Findings in relation to this research question were drawn from responses across the parents' and early years educator focus groups and the parent and practitioner questionnaires. A link between young families' access to nature and location (living in the countryside or town) was evident, and some common issues emerged across both data sets.

### Parent Perceptions

Location played a role in relation to access to nature. The parents interviewed from London lived in flats and therefore had no direct access to a garden:

R: Do you have gardens?

P1: I don't, I've only got a balcony at the moment.

P2: There's a park nearby though, but just a balcony. But I think that's London. Any of my friends do have a garden, it's amazing.

One parent expressed some concern as to how environmentally friendly it was to go outside at all:

P2: And where we live it's just flats, where we live it's not good smells, the environment is not good enough.

Some 88% of parents stated that they specifically travelled either by car or by bus to gain access to nature. Transport was a particular challenge for parents in London:

R: So we've talked a bit about the fact that you can't just walk from the doors. Are there other things that you think are barriers to getting children out?

P1: Transport.

P2: Transport's been a huge limitation to me...I don't drive and with twins it's a challenge because I can't just get in on my own, you can for example get in an Uber, put a kid on your lap, but I can't put twins in my lap. So especially in East London transport is an issue, the connections just aren't as clear and there's not step free access on the underground the same way...

On the other hand, parents who lived in a rural area in the north east of the country expressed concern that there was less money available to develop outdoor play spaces for families because the area was deemed not worth the expense:

P1: There is lots of access to nature here but there is less invested in things like parks for children. The park where we live has much less in it than when it was first put in years ago and there is very little left for the smaller children.

P2: Yes, our village play park is very scaled down. I think we aren't prioritised for spending because we are a small population.

Finally, there was some evidence from both parents and children to suggest that going outside could be weather dependent:

P: During the first lockdown we used our full hour and walked every day unless the rain was absolutely torrential.

C: When it's raining, we go inside. I like snow.

[Although this final citation comes from one of the children, it is the parents who are the ones making the decisions about the suitability of weather].

#### Early Years Educator Perceptions

Similar issues emerged for the early years educators in relation to access to nature, including type of housing:

A lot of our parents are students living in flats – not all have outside space. They have to go somewhere to find nature and it's more of a trek for them.

The university parents were often far from home and did not know the local area:

A lot of parents who come to work for the university or come to study aren't necessarily from around here. They don't know the area and are not aware of what is around them. Although as you walk out of nursery you see the campus with all the squirrels, they don't necessarily know that if they walked down the bank they access the river and the cathedral grounds. Some of them arrive and literally just know where the bus stop is to get to nursery and home again.

Cultural differences and EAL (English as an Additional Language) learners were mentioned.

Then again, English as an additional language, they don't always have the confidence to branch out and try these new things if they can't communicate. So it's building their confidence. It's a scary thing.

Early years educators also talked about the fact that some children were reluctant to get dirty:

Some children get anxious about getting dirty. We get children to understand it is ok and that they can embrace mud play.

Responses from early years educators at the special school also mentioned stigma and worry as a potential barrier to being outdoors:

SS1: I think our parents do have that fear because there are people in the public who still don't have that understanding of children who have autism. Even the boy himself said a man said something quite unkind to him because of his behaviour and he was very aware being out and about that people treat him differently. You think well how's that going to affect him when he's older, he'll then have that fear of going out...when he's here he loves being outside and I know he has a big garden outside that he uses, but I still think it's not the same as going to like a wooded area or a park

SS2: I there were parents of mine, they do have that fear of taking them out, especially I know there's one parent of mine, she's just really scared to take him anywhere now because she doesn't know how he'll react to people, she doesn't know whether he'll stay with her, whether he'll run off.

One early years educator expressed a perception that going outside could be problematic from an organisational point of view for educators who worked in primary settings:

I think sometimes teachers can be a bit nervous about taking it outside. I know from when I worked in mainstream, especially when you've got 30 of them and you're trying to manage all of them, you obviously don't have as many TAs as we have here...

This point was echoed by the special school teachers. All the early years settings had a dedicated outdoor space used daily, however the special school teachers felt challenged by their outdoor resources:

In a perfect world we would really need an outdoor space dedicated to just learning, because a lot of our outdoor areas, with the way that our schedules work, overlapped with different breaks, there's never really an available space to do just learning. And then that space should probably need a cupboard of resources as well, because that's another thing that makes it quite difficult, you're constantly taking things outside, and a shelter would be good as well.

Finally, responses related to the differences in early years and primary curricula and access to nature:

...we teach it the way we wish to teach it, so that's our interpretation of it, that we expect the indoors to be reflected outside. So we give it equal weight. I don't think it's explicit in the curriculum anywhere. Also we develop it very thoroughly by following the children's interests, then we will develop activities within the curriculum outside, to encourage those children as well to go outside. But I think Key Stage 1 not very much.

I'd say the same thing actually. From reception where most of the time they have a lovely playground with lots of activities outside, and they go straight to year 1 where they only have a not equipped playground very often and it's only half an hour. Apart from PE they don't have access to outdoor spaces. Some schools are doing some planting activities, planting club during lunchtimes, but that's not enough really is it, it's not structured time.

### Summary Comments

The overall findings emerging from the data across the parent and early years educator focus groups suggested that access to nature was not similar for all. Barriers to nature included the type of home lived in; the quality of the outdoor environment; having the means to get to outdoor spaces, including transport and cost; the weather; and for early years educators, the intrinsic needs of specific groups of children such as EAL learners, and those with special needs. Limitations of curricula beyond the Early Years Foundation Stage were also perceived as a barrier.

### RQ3: Is young families' access to nature being enabled both at home and in the early years setting?

Access to nature was seen as important across both home and setting contexts, for example adults noticing a clear link between children's well-being as a result of going outside.

#### Parent Perceptions

Questionnaire responses revealed that access to nature was a daily occurrence for 51% of parents, with 40% answering weekly. Two parents from the focus groups made links between the impact of being outdoors on their own well-being and surmised that it must be the same for their own children:

There was a Ted talk recently about well-being. It talked about depression and mental health and how nature is a way to improve your health. If it is good for adults, it must be the same for children.

I struggled after giving birth and went to a buggy fitness class which was outdoors in a country park. Even when I was low it forced me to get myself out and it was lovely there. There was nothing to dislike about the place. It was there when I needed it.

Sometimes parents talked about wellbeing directly in their responses:

It is good for children's mental health to be out in nature.

You feel better for being outside. [Name of child] is much happier when she has been outside. She is less boisterous when she has had some time outdoors.

Parents further commented on additional positive benefits to going outside with their children, including having a sense of ownership:

It gives them their own space and helps them realise what is going on in the environment.

Having freedom was also mentioned:

It is very important [to get outside]. My daughter loves being outside, it gives her a sense of freedom.

Another plus was physical development:

It's good for physical development to be in large open spaces. They [children] have a chance to let off steam and get some good exercise.

Sometimes it is just the chance to run around.

Getting away from screens was also a common theme for parents:

They need to get away from indoor games and too much telly.

A number of comments pertained to the perceived benefits of fresh air:

We are always out, everyday walking. We need the fresh air. It does you good to get out and about.

It is enormously important. You get fresh air; children can run off energy.

It is important to have fresh air and to be able explore.

Several comments also pertained to the educational aspects of outdoor experiences:

There's lots more for her to see and talk about outdoors.

It's all education being outdoors.

We are lucky to have our own garden, lots of families don't. We can talk about the plants and animals that we see.

They learn everything outside. There are less distractions such as TV and iPad. They learn to do things like jumping and balance. My little one loves to throw stones into the river – this helps her throwing action and her balance.

They are always picking up things and showing an interest in nature. Mine picked up three leaves on the way here and wanted to show them to me.

Yes, I really do believe that children are happier in the fresh air. There are more things for them to see and do. It gives them things to talk about.

One parent felt that children could be themselves outdoors:

It's just about children being children, they have a chance to play in natural places.

For another parent, being outdoors was the place to get dirty:

I think especially with the kids growing up in London I'm constantly looking to get them dirty, and I think we're lucky with this, and the gardening, we're lucky that we have... some parks. But still, if ever I take them to the countryside and they're rolling around in the dirt that's when they're happiest.

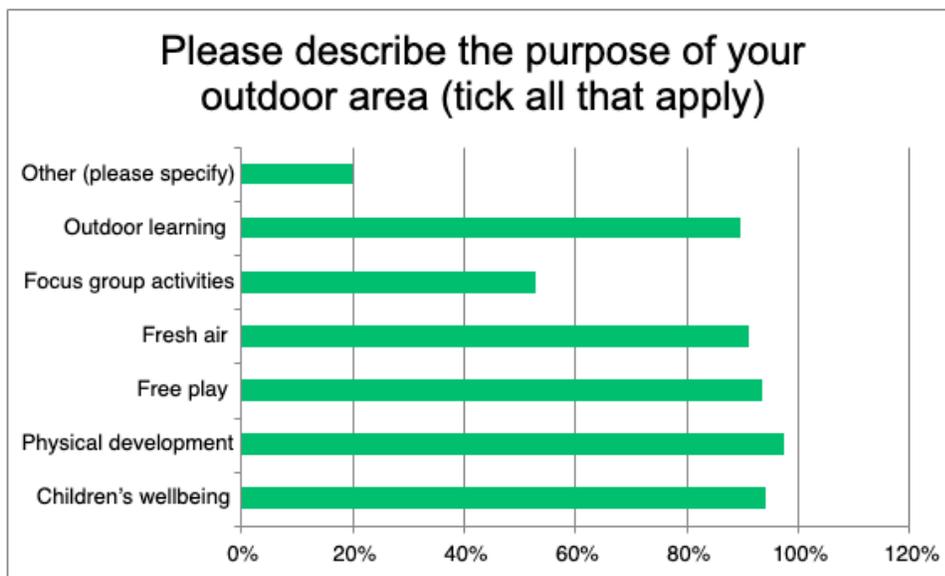
Finally, outdoor spaces were perceived as safe contexts for children in which to be:

I prefer to be in a place where you know it is safe for your children, no debris

### Early Years Educator Perceptions

98% of those early years educators who answered the questionnaire felt that their children enjoyed the outdoor area. 97% of respondents stated further that it was very important for children to spend time outdoors; the remaining 3% felt it was important. 70% of respondents stated that their setting adopted a free-flow policy in relation to time spent outdoors. In terms of what children gained from being outside, respondents described the purpose of their outdoor area (see Table 9).

Table 9: The Purpose of the Outdoor Area



Similar factors emerged from the early years educators' focus groups in relation to the reasons for and importance of enabling outdoor access. These included the impact on children's wellbeing, the freedom and possibilities when outdoors, alternative experiences of children's learning and development, and the benefits of fresh air.

There is some research that says playing with mud makes children feel better. It releases endorphins.

I think as well living in a city a lot of the children are on iPads and laptops, some of them don't even know what a hedgehog is.

Fresh air, just getting out and not stuck in the house all the time.

One of the settings described outdoors access as crucial:

Well, we believe it's crucial, absolutely crucial to well, to development, to you know everything.

A difference in children's behaviour was reported:

We see a huge difference in the children's behaviour when they have the opportunity to be outdoors.

The possibilities of being outdoors were typically framed in terms of open-ended learning experiences:

It's so open-ended when you're out there and so much you can do. When you're in the woods there is no right and wrong way to play there. So much to do, so much to learn, so much to explore.

It's all those opportunities, like we said, open-ended. It's not about end-product, it's the process and how you're enjoying it.

It's [learning] so different outdoors. So if you were to do something the learning intention would be so different. If you had playdough inside and you took it outside what you find and what you can do with it is completely different depending on the area in you are in.

I would say prolonged amount of time not just a quick walk around a garden or on the way to something else, to actually be able to access it in terms of being in it, and with it and be able to actually explore on their own agenda a little bit as well

...being able to just stand still and take it all in.

100% of questionnaire respondents stated that they enjoyed being outdoors with their children and 97% felt it was very important for children to spend time outdoors, yet 12% of respondents answered 'No' to the question, do your children all have equal access to the outdoors? Reasons for this included the positioning of rooms in relation to the outdoor area, and sharing the outdoor space with other cohorts of children, for example where a nursery was attached to a primary school.

Many focus group responses centred on early years educators' understanding of what children learn from being outdoors. Comments centred on ways to encourage children

to be curious about their environment and nature, caring for animals, and showing care and respect:

Yes it [nature] can be quite sensory can't it?

Yes like smells.

Opportunities for observation and developing children's knowledge and understanding were also mentioned:

And the patterns and the clouds racing by, things like that.

From being in nature they learn as well if it's cold they have to wear a coat, simple things like that.

I think giving them [the children] that sort of groundwork that if you don't water a plant or a flower it won't grow, basic things like that.

Recycling was mentioned, and being aware of how to care of the planet.

Yes, we're looking at the whole recycling and the purpose of the eco-school is I want to teach the children that when they're our age this will be their planet so we need to start from now basically. It's all about nature and recycling and re-using

I think it helps reinforce that there are consequences to how we live now. So you mentioned recycling, I did a really recycling activity where the children had to collect different materials from around the setting and we sorted them into plastics and metals and spoke about what we do with our rubbish and what happens when we recycle...

I think that children learn to take care...even if they see ants or snails, they sometimes stamp on them and kills, and even plants, if we put flowers out, so they learn to how to look after nature.

We do composting, we do you know all those kind of things we're always looking at those changes around them.

Early years educators talked about the wildlife in their setting gardens, including bird watching, but also how access to nature can extend home-setting links:

I think we're lucky that the garden we've got, as urban as it is, really does attract a lot of passing wildlife.

We're quite good at encouraging and enticing that wildlife in, like making the Cheerio birdfeeders and laying our conkers for the squirrels to come and

collect, the children had binoculars today really excited waiting for the squirrels to come and take these conkers. It was great because they're gentle and they're caring and they interested, they're so engaged by something as simple as hiding a couple of conkers in a bush, they were happy to wait for that moment for the squirrels to turn up. I think we're quite good at looking at the wildlife that does come and I think that's quite a good return.

And even things like the conker necklaces that you guys made using the conkers you'd collected. A lot of the forest school activities are things they can take home.

I think the nature crowns that you make and the weaving, the wood and natural material weaving and they went home, and they were stunning. I suppose that you hope that when those children take them home that there's some conversation that goes on, because they forage for them as well, it wasn't just that they turned up on a table, they'd actually had to and forage some of the materials to be able to make it.

Further learning opportunities included a greater awareness of what is around the children and the importance of experience:

It's important for them to perceive what's around them, not only the man-made things but actually what is out there as part of nature. It has a great impact on the moods and the physical skills and it's essential for young children to be out there, to experience what's around them.

So we have some formal things that we can do outside as well as a lot of just discovering through nature, extending what they're learning inside.

The language used by early years educators to describe the potential for outdoor learning was rooted in early years curriculum vocabulary and pedagogic approaches:

... also to develop **curiosity**...outside it's so big and wide, for the child their **imagination**, their **creativity**, can grow immensely.

It is the **open-endedness** of the resources. A child can make a stick almost anything.

Being in nature opens up lots of **lines of enquiry**.

Children access nature all the time. We have **free flow** for most of the session into the nursery garden.

We like to bring nature into nursery too. We often bring objects and resources in from outside so that children can **explore** them further.

I think it's like we said, it's the **awe and wonder** is really important.

...**listening** all the time around us, like the birds, like woodpeckers, so we really listen carefully to what's around us, and that really helps. Even the parents comment, it's so peaceful here, it's good for mental health.

Because children are born to **explore** the world I can see that being outdoors is what they need, what they crave for, and it also makes them happier to have the opportunity to explore.

In terms of development, it sounds like you're talking about **physically** they have more space more freedom but also, **emotionally** they've got the chance for **more independence** is that, yes, more independence

Further direct links to the areas of learning and development in early years curriculum were specified:

It's such a rich variety of learning outside, so it does bring along their personal, social and emotional, it does bring on the physical, it does bring on their maths and that kind of thing. So it's not just let's go out and run to get the physical side of things. It's educating the children that they don't just have to run around – why don't we listen to the sounds we can hear, why don't we look at what we can see, what colours we see, why don't we count the balls we can kick into a goal. Things like that so encourages all kinds of learning.

It is important for language development; it helps to see real things and use your senses.

One comment centred on parent wellbeing, as well as that of the child:

If a parent is a single parent perhaps and hasn't got a garden being in the house with 2/3 children is very hard. It's about promoting getting out and directing them in areas that are safe or giving them the ideas of little things, they could do. To help the parents' well-being as well.

Participant early years educators from the special school discussed specific benefits for their children:

SS1: I think it's just quite calming. I think here especially I use the outdoor areas quite a lot for calming time because it gives them space and they [the children] don't feel confined and they don't feel trapped or anything...some of them don't have that at home, or aren't taken to forests or parks or whatever.

SS2: I think as well at this school those areas are made to feel quite special, and they tend to be the places that children request to go to. I have a lot of, I want to

go to the sensory garden, I want to go to the nature garden, I want to the big playground. I think maybe their sense of freedom as well, they can just run.

Whilst staff members all felt outside experiences were important, some mentioned the challenges of encouraging reluctant children to spend time outside and trying to find creative ways, or strategies, to expedite engagement:

...some children are focused on activities inside so for example, there are some children who love creative activities inside so we try to offer the same thing outside, we have to invite them to come outside and do some creative activity outside.

...We've got some children that just aren't, outside is very big, you tend to get children running around and they're just not quite ready to go outside yet.

I know some of them [the children] don't like the cold or they don't like the rain so it's thinking what can you do with that. One of ours hates being cold but he likes to be able to see his breath, so you can take them out that way and get them interested in that.

Three settings offered their pedagogic strategies for supporting reluctant children, including limiting choice, and following children's interests:

We swap the key people around, they're in an area for four weeks, so if your key person is outside you have to go outside to sign in in the morning. So we try and encourage them in some ways, and also the key person obviously will know that the child is reluctant, so if they're working inside they would swap with someone to take them outside to get them to be interested in it.

We have a space we call the garage. It is a space that helps children to transition between indoors and outdoors. The shutters are up and it can feel like indoors and outdoors.

I think we're quite good at finding ways to engage the children that maybe aren't that interested in outdoors. So we've done a lot of water-based activities, like painting with flowers, looking at prints, pumpkins, and doing that in class is a way to build up their interest and their engagement so that they can then venture outside.

One setting described how for some children, appropriate outdoor clothing was something new:

If they don't go out because of waterproofs, we encourage them out at first with a coat, then add the wellies and gradually coax them into waterproofs.

It sometimes helps if the parents can provide waterproof clothing because it is something they are familiar with from home.

Clothing and perceived bad weather was seen by some early years educators as the biggest barrier to going outside:

We find the biggest barrier can be the waterproofs for children who are not used to wearing them.

There's all this misconception [amongst parents] about in the cold, if it's raining, as the weather changes it's almost like you don't go outside, you can't go outside because you catch a cold from being outside.

Yet being outside in all weathers was seen as important:

And that can be in the rain, it could be in the sun whatever the weather, it is experiencing those different things and to know what it's like to be a bit chilly outside.

Interestingly, 35% of the parent questionnaire responses cited the weather as what stopped them or might make it difficult for them to take their children outdoors.

Again, cultural perspectives were mentioned:

Culturally some parents don't want their children out in certain weathers getting dirty, wet, cold or even too hot.

Finally, coming to the setting by car rather than walking, and thus being oblivious to the outdoors was highlighted as a concern:

...you see parents parked up outside the school half an hour before picking up the children and I think you could have parked 15 minutes away from the school. I know there's people living down my road who live within 5 minutes of the local school and they drive, when that's a perfect opportunity.

### Summary Comments

For both parents and early years educators, enabling access to nature was important, however there were some differences in perspective. Those early years educators of city-based children clearly felt that part of their role was to fill a perceived gap in the children's outdoor experience, especially those children who lived in flats, however both parents and early years educators across all contexts described benefits to being outdoors. For parents of children with special educational needs, additional concerns

were expressed to do with avoiding stigma when outdoors with their children. Early years educators talked about barriers to going outside including reluctant children, appropriate clothing, attitudes to the outdoors, and changing patterns of behaviour amongst parents such as driving the short distance to school. Early years educators understood clear links between being outside and possibilities for learning.

## RQ4: Has Covid had an impact on children and their engagement with the outdoor environment?

### Parent Perceptions

For some parents in the north east of the country and living in a rural area, Covid restrictions had not had a particular impact:

No it wasn't limited. It is open to the countryside here and there are lots of walks to do. It is difficult with pushchairs but we didn't have to make adaptations for Covid.

A strong link to being outdoors and wellbeing during the pandemic lockdown emerged:

We walked as far as possible. We needed it for our mental health. We would have gone crazy without being able to get out and walk or run.

The travel ban during the first lockdown limited access to outdoor spaces:

Not being allowed to travel meant we could not drive to the local nature reserves any more.

For others, being outdoors with facilities such as parks closed, was particularly challenging due to family circumstances:

It was hard having to walk to enjoy the outdoors – I had a new baby, a young child and a dog. It is not always easy with a pushchair.

Parents however were creative with the outdoor space available:

I went running by myself, went out with the youngest on the scooter and was able to use a bit of green behind the house for cricket practice with the other.

Having a dog helped. When the dog needed a walk, we all went. It was a case of right get your coats on we are all going for a walk.

We tried to get out every day. We went for a walk. We had different routes. The kids helped to plan and plot the routes on the phone.

We just started using the nature spaces that were within walking distance, going for walks and feeding the local ducks.

Those with gardens were grateful:

We are fortunate to have a garden and we were out as much as possible.

We used the garden; small children are happy in a garden.

Some effects on family relationships were mentioned:

We have a dog and we were finding that we started to argue over who was going to walk the dog as we all wanted to be out in the fresh air as much as possible.

Yes, we even fought over who was going out to the shops!

I found it was easier with the younger children. They were keen to go out but my 15-year-old just got her head down and worked in the house. I struggled to get her out She was older, more aware and fearful of going out.

One parent spoke of the impact of Covid on people in general and the need to be respectful of others' viewpoints:

Different people have been left with different levels of anxiety. It is about being tolerant of different outlooks.

Finally, parents mentioned a new appreciation of the possibilities for being outdoors with their children:

I definitely appreciate outdoors and nature more, we couldn't do things like play centres because they were closed.

Yes, it's better. We can use our imagination and find spaces to go, explore and find things to do where you would have usually relied on those indoor centres.

This year we have been growing our plants for the first time and they really like that. They get a lot out of watching them grow, smelling the herbs, using all their senses.

We have discovered lots of places on our doorstep to enjoy nature.

A lot of families don't use what is around them. They are sometimes amazed when I tell them where I have been and what I have done with the children nearby.

### Early Years Educators' Perceptions

For early years educators, there were concerns about the impact of Covid and lockdown on children's experience and understanding of what it means to be outside:

...lockdown babies, a lot of them haven't had any social activities with any other children especially, let alone getting dirty and digging up worms.

...with Covid, our kids have been hibernated.

There were direct implications for children's wellbeing:

I would say from the pandemic happening it's quite evident that children do need to be outdoors. I think the children that struggled the most during that period of time were the ones that didn't have a garden or outside space to go to and were trapped in their flat.

...the ones [children] that thrived the most were the ones that were having the outdoor time.

Some early years educators were surprised, however:

Funnily enough during the lockdown I actually had parents apologising for taking their children out rather than doing the work. I had one parent who was saying I'm really sorry they haven't done their work and I'm sorry I took them out, we went to the woods and telling me all those lovely things that they did. Even with my reassurance that that was ok and that it was lovely to hear that they were out, one of them had learned to ride a bike, but the parent was still apologising.

Again, a cultural theme also emerged:

Some of our families have moved from other countries and they are worried about the Covid side of things. They are not necessarily taking their children out so much and they are more cautious - don't want to go out in case they catch it. They are protective over the children.

### Summary Comments

Covid had had an impact on children and their engagement with the outdoor environment, however whilst the majority of parents described new approaches and experiences, early years educators tended to be more cautious. They focused more on the consequences for those children who had not been exposed to the outdoor environment during lockdown. There were some concerns about children having missed social contact with peers.

### Additional Findings: Effective Pedagogical Strategies

Two key themes emerged from the data outside the immediacy of the four research questions framing the data collection. These were in relation to the early years educators describing two effective pedagogical strategies used across their settings to support children's and family engagement with outdoor spaces. The findings have been included because the parent questionnaire data showed that whilst 84% of respondents felt it was very important that their child/children spent time outdoors, 16% replied it was only important. This contrasts with a 100% response from early years educators to the same question.

### Being a Role Model: Working with and Involving Parents

Early years educators felt attitudes to being consistently outdoors were important:

Our attitude towards the outdoor environment, we are positive, the children tend to be positive and the parents alike as well.

...we have to be a role to model being outside. Yesterday funnily enough, staff began to take children outside and it was spitting with rain and the staff started to go, "Oh no, it's raining, and I said, "It's a tiny bit of rain." Because the adults getting nervous about it raining the children then reacted and they were all huddled under the shelter and the children were getting slightly silly... I think that's part of the problem, some adults don't like to be outside when it's cold, so then it transfers on to the children.

I think what we do is kind of lead by example, taking them out to places. We go to the local parks and invite parents to join us, the farm which is just round the corner, lots of parents aren't aware of these things.

One setting spoke of the importance of leading by example, involving their families in nursery walks and outings. Encouraging appropriate outdoor clothing was also mentioned:

And clothing, I love the way we have snow clothes and we tell the parents that we have these snow suits; we always have the right gear.

Inviting parents to join in to build up confidence was seen as valuable:

Parents have the opportunity, I normally do a coffee morning at the Forest School site, where parents get to see what kind of activities, it's not just going there looking for bugs, we do lots of different things there. Then once the parents are confident and comfortable and they join us, that helps.

The Children's Centre gardener deliberately chose small 'take me home' projects to develop links:

Last time we did some bulbs and a few of the children took a plant pot with a bulb and put it on the window sill and come spring they will see that. We did spring onions and garlic just using the roots, so when you get the spring onions rooted, it's great we just brought them, the children sliced them, tried the spring onions, sliced the roots, we planted them, took little pots home and then two weeks later they're watching them all sprout up. And it's something really easy, really simple, that even a lot of the parents say I'm learning this for the first time, this is what it should be about.

The notion of educating parents was echoed in other comments, for example:

It's about educating our parents as well and working with them to show them different things they could do at home. It doesn't necessarily mean that they need to have a garden.

### Signposting

Settings adopted a range of signposting techniques to highlight the possibilities of being outdoors as a family, often linked to learning. One setting sent out holiday tasks that involved going outdoors; another raised awareness of the seasons. At this setting, children were encouraged to bring natural objects in to share:

Autumn is a great time. We have sent autumn bags home for parents and children to pick things up and encouraged them to share the autumn treasures they have found.

Early years practitioners felt they needed to be aware of potential outdoor experiences to suggest to parents, again linked to opportunities for children's learning:

I think it's about the things going on around us. At the minute, the moon exhibition is up in the cathedral, Lumiere is coming, there will be firework displays and villages around are having scarecrow trails. It is about signposting our parents to them.

We have planning around core books and we send connected suggestions for families.

And we put on social media and the newsletters, say for the holidays, places we suggest that parents take their children.

Emailing newsletters was seen as a good strategy for easy signposting:

...because the newsletters are emailed you can put the link so it's easy for them to use the link to find where they could go as well.

One setting had even set up a nature group for parents:

We have a nature parent group that is promoted on Facebook. Ideas and activities from it are also shared on Facebook.

### Summary Comments

Strategies for engaging parents in the potential for outdoor learning emerged from the early years educators' responses. These included the importance of being a role model, and signposting in various ways to help parents gain ease of access. These strategies are of potential importance when considering the development of effective outdoor practice and effective communication with parents to encourage similar experiences at home.

## Key Findings

Six key findings emerged from the data.

- 1. Access to nature was clearly defined according to the individual perceptions of each of the three stakeholder groups involved in the project; the participant children, the parents, and the early years educators. Definitions of access to nature shaped adult responses as to what were perceived as outdoor experiences available to young families.**

The children's perceptions of access to nature centred on play resources available to them both at home and in their early years setting. Being outdoors was always about being active, and engaging in activities to support the development of both fine and gross motor skills. It also included a social aspect, or companionship, particularly playing with siblings in the back garden at home. Three of the twelve participant children perceived being outdoors as being involved in specific nature activity, although for one of these children being outdoors was also about playing with toys. Key adults in the children's lives, including parents and grandparents, had an impact on the types of experiences children were exposed to outdoors.

The definition of access to nature across adult participants differed between the parents and early years educators. Parents talked about gardens and being outdoors with their children in a range of spaces and places. Whilst one set of responses amongst the early years educators centred on a clear definition of the term 'access to nature' as being outside and exploring the environment, the term was typically described in the context of what the setting could offer the children in their care in relation to in situ outdoor experiences. Early years educators' responses tended to additionally focus on what their setting outdoor area could offer children in terms of vital, missed, or important outdoor experiences, particularly post-lockdown and once children had returned to the classroom. Some early years educators clearly felt that part of their role was necessarily filling a perceived gap in experience, particularly in city areas where they knew that many of their children lived in flats and did not necessarily have direct access to outdoor space. Data from the primary special school revealed that here there was also a concern about being outdoors for outdoors' sake, particularly as children moved into the Key Stage One curriculum where opportunities for outdoor learning were not necessarily specified. In this respect, outdoor learning and experience needed to be purposeful rather than 'contrived' and the difficulties of planning outdoor learning in this educational context were mentioned as an issue. In contrast, all the early years settings interviewed described their outdoor area as a space where learning opportunities were naturally embedded as part of the early years curriculum and effective early years practice.

- 2. Access to nature was not similar for all young families.**

A link between young families' access to nature and location (living in the countryside or town) was evident. Additional limitations are covered in Key Finding 4.

**3. Young families' access to nature was, where possible, being enabled both at home and in the early years setting. This included during the lockdown periods of the pandemic.**

Access to nature was seen as important across both home and setting contexts, for example adults noticing a clear link between children's well-being because of going outside. This aligns with the definition of Kahn and Kellert's (2000) definition of nature contact as physical contact with the living systems of the world; and Mayer and Frantz's (2004) notion of nature connectedness and the emotional and cognitive impact on the individual of being outdoors. For both parents and early years educators, enabling access to nature was important, however there were some differences in perspective. Those early years educators of city-based children clearly felt that part of their role was to fill a perceived gap in the children's outdoor experience, especially those children who lived in flats, however both parents and early years educators across all contexts described benefits to being outdoors. For parents of children with special educational needs, additional concerns were expressed to do with avoiding stigma when outdoors with their children which meant they went outside on a less regular basis. In addition, this group of children could not always access the outdoors independently. Early years educators understood and elucidated clear links between being outside and open-ended possibilities for learning; the language used by early years educators to describe the potential for outdoor learning was rooted in early years curriculum vocabulary and pedagogic approaches, for example.

**4. Barriers to access to nature emerged for both parents and early years educators.**

Early years educators talked about barriers to going outside including reluctant children, not having the appropriate clothing, children's attitudes to the outdoors, and changing patterns of behaviour amongst parents such as driving the short distance to school. Barriers to nature included the type of home lived in, for example a flat or a house; the quality of the outdoor environment that was available; having the means to get to outdoor spaces, including transport and cost; the weather; and for early years educators, the intrinsic needs of specific groups of children such as EAL learners, and those with special needs. Limitations of curricula beyond the Early Years Foundation Stage were also perceived as a barrier by those teaching in a special needs primary school.

**5. Differing opinions across the adult data sets emerged in relation to the impact of Covid-19.**

Some families felt that Covid-19 had not made any difference to access, whilst others felt strongly that it had. Early years educators all felt that it had made an impact. Interestingly, whilst Covid-19 had had an impact on children and their engagement with the outdoor environment, the majority of parents described taking new, more creative approaches to being outdoors. In contrast, early years educators tended to be more cautious when considering the impact of Covid-19. They focused more on the consequences for those children who had not been exposed to the outdoor environment during lockdown and the need to compensate for this. There were also some concerns about children having missed social contact with peers, which is of note as Key Finding 1 reveals that there was a clear social aspect to being outdoors for the participant children themselves. It is important to highlight here that access to nature emerged as perhaps one dimension of the impact of Covid-19. The perceptions of parents to the disease also limited outdoor activity for some, for example fear of exposure.

Froebelian philosophy centres on the child in relation to nature in relation to two aspects; first, outdoor play in a natural environment; and second, indoor play where the child engages with natural world-inspired resources. Whilst it may be of note that participant responses primarily focused on the first aspect only (apart from the Children's Centre gardener who liked to send projects home with children), a third aspect of Froebelian philosophy involves the importance of social interactions; those between the adult and the child. Findings showed however how important child: child interactions were to the participant children, both sibling: sibling and peer: peer. There could be some conjecture as to the impact of Covid-19 in relation to peer: peer interactions once children returned to their early years settings. Indeed, personal, and social and emotional development (PSED) is a prime area of the Early Years Foundation Stage (DfE, 2021).

**6. Two effective pedagogical strategies used across settings to support children's and family engagement with outdoor spaces emerged. These were the importance of being a role model, and signposting in various ways to help parents gain ease of access to outdoor places and spaces.**

These strategies are of importance when considering the development of effective outdoor practice in the early years and in expediting effective communication with parents to encourage similar experiences at home; in other words, enabling access to nature. Working with parents as children's first educators is a core tenet of the Early Years Foundation Stage (DfE, 2021).

## Implications of the Access to Nature Project for Future Research

The purpose of this research project was to explore data across real-life early years environments to help to explain the complexities of children's outdoor experiences from birth; in other words, their access to nature. There are both strengths and limitations for

the findings that emerged from the project, not least its small-scale nature. Whilst our findings do support themes raised from the initial literature review, and, further, could be collated under distinct headings, there is a collective understanding that small-scale research of this nature, suggesting that human behaviour is significantly influenced by, or is intrinsic to, the setting/s in which it occurs, leaves the project findings open to criticisms of limited generalisability. We would argue that this is a reasonable perspective to hold and a valid conclusion to reach. The findings do however support evidence that has begun to emerge from the existing literature base, particularly pandemic-related, to support the fact that there are patterns to children's outdoor experiences, and that children are engaging, and indeed, need to engage, with outdoor environments as a natural part of growing up, from birth onwards. Indeed, the significance of the outdoor environment in early years settings has been a key theme of continuing curriculum interest and research since Bilton's (1998) ground-breaking book 'Outdoor Play in the Early Years'. In terms of the conceptual framework of the research project therefore, the conclusions drawn from the presenting data are valid and justified.

There are additional strengths to this research project which must be noted. It has already been stated that attempts were made by the research team to reach as representative a cross-section of the population to include both densely populated city areas to rural settings. This was achieved within parameters set by the overall timescale and funding of the project. The final report therefore reflects a robustly planned and executed research project. Finally, there are potential implications for effective early years pedagogy and practice that provide the foundation for further lines of enquiry in relation to future research. In summary, the 'limitations' of this research project reveal indicators which could usefully inform practice and further research. Research would be equally valid in relation to both small-scale and larger-scale projects exploring children's access to nature, and in so doing would provide increasing data for a justified and reliable evidence base.