

Natural Play in the Forest: A Pilot Evaluation of a Forest School

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Mouse or Gerbil? Bee or Wasp?



Introduction

- There are concerns that children are becoming disengaged from the natural environment
- Andconcerns that the current generation of children have fewer opportunities to play
- This links to societal changes in safety attitudes (Staempfli, 2009)



Natural Play

- Children enjoy playing in natural environments and/or with natural elements (Titman, 1994)
- Natural environment can stimulate and facilitate varied play
- Regular engagement can have positive effects (Fjortoft, 2000; Fjortoft & Sageie, 2001)



The Mersey Forest – Natural Play

Involvement in the Forest

- School grounds development
- Junior Rangers
- Practical events and activities

New opportunities:

- Forest School
- Natural Play

New partners:

- Liverpool JMU
- FEI Cluster Groups



Northwest Natural Connections Pilot

'We want 1 million children to have the opportunity to enjoy nature and the natural environment in the next 3 years.' Natural England

Use **'Forest School' and Community Woodlands** to reconnect children and their families with their natural environment in The Mersey Forest

- **Research**
- **Trial activities**
- **Enhance woodland areas**
- **Share findings and support people**



What is Forest School?

- Unique regular outdoor learning
- Not an 'add on'

Philosophy:

- Promotes independent learning – experimentation

Through:

- Small achievable tasks
- Child led learning
- A qualified leader



Aims of the study?

To evaluate over 12 weeks:

- How Forest School affects children's knowledge of the natural environment.
- What are the barriers to natural play?
- What were the benefits/changes?



Methods

- 17 children (6 boys, 11 girls) Year 2 class (6-7 years old) in one school participated
- Forest School sessions for 2 hours a week for 12 weeks (24 hours total)
- Measures collected at baseline (March 2009) and post-Forest School (June 2009):
 - **Questionnaires**



Observations of playtime physical activity
and behaviour



Child group interviews



Questionnaire

- Twenty-one item questionnaire completed during class time
- Items assessed included the following information:
 - Where they liked to play
 - Where they are allowed to play
 - Reasons for responses above
 - Knowledge of local wildlife in area
- Frequency analyses conducted on quantitative data

Questionnaire Results

Table 2: Children's responses to where they like to play and where they are allowed to play (% of children stating yes) at baseline and post-test

	Like to play				Allowed to play			
	Boys		Girls		Boys		Girls	
	Baseline	Post-test	Baseline	Post-test	Baseline	Post-test	Baseline	Post-test
At home**	83	83	73	91	100	100	91	91
Gardens**	100	83	82	91	100	100	82	91
Streets	50	67	45	45	50	50	27	37
Parks**	83	83	73	91	100	83	73	91
Woods**	100	67	64	91	83	83	36	91
Beach**	100	83	73	73	100	100	73	91
Streams/rivers**	50	67	27	63	33	33	27	36
Playgrounds	83	83	82	91	83	100	82	91
Football pitches	83	83	45	55	50	83	55	82

** indicates more natural settings

Child Results observed in the playground

Positive verbal interactions increased from 46.3% to 54.1%

This suggests that children were more confident in organising and supporting activities for their peers, and that they were more prepared to assist other children

- Increase in physical activity
- Group size and social network increased
- Wider use of playground and more natural space
- Replayed FS activities
- When sedentary, used green environment to chill out



Interviews

- Twelve small focus group discussions before and after Forest School, questions asked about:
 - Experiences of play
 - Experiences of natural play
 - Barriers to play
 - Favourite Forest School activities (post-test)
- Interviews transcribed verbatim for further analysis
- 147 double spaced pages created from this process





Results

What children like about playing outside

- I can run more, I can jump more
- It is nice and breezy
- Playing outside is fun
- I like playing on my bike and getting fresh air



Barriers to Play

- Children reported a range of barriers to play:
 - “I’m not allowed to go out when it’s raining.” [Girl]
 - “I want to play on the front but I’m not allowed because my mum said somebody might take me” [Girl]
 - “I’m not allowed to go by myself [*to the park*] because there’s always strangers “[Boy]
 - “I live on a very busy road” [Girl]
 - “I do have a bike but the cars in the way in the garage” [Boy]
- When children could play away from the home environment, they were often supervised (parents and older siblings)



Confidence

Baseline

Some children lacked confidence:

- “Sometimes when I go up trees I climb up and I go upside down” [Boy]
- “I want to climb trees but I can’t” [Girl]
- “When I went to the butterfly house, one flew on my head... I was scared of them” [Girl]

After Forest School

Some children, overcame fears or engaged in new activities:

- “I’m still scared of earwigs... but I can look at them now” [Girl]
- “I learned about worms, and now I’m not scared of worms anymore” [Girl]

Social Skills

- **After Forest School**
- Forest School activities provided children the opportunity to work and play co-operatively with their peers, and they learnt about helping other children:
 - “I was helping four groups at once. I was helping Adam, Liam and Jack the most, because they had to do some untying and move it” [Girl]
 - “I learned to respect everyone else” [Girl]





Knowledge and Understanding

■ After Forest School

- “We don’t kill the creatures and we don’t break or kill the trees by ripping them off” [Boy]
- “We learned how to be safe around the fire. You can’t walk through it. When the fire is going you might even get burnt” [Two girls, 1 boy]
- “What I learnt is if there is a tree in your garden there is wildlife on it” [Boy]

Children's Creative Play

■ After Forest School

- “When we first made it [the den] and we pretend [*sic*] it's a rocket” [Boy]
- “I had the most fun making my own *pretend* fire. You put dirt on the top; make it look like you've used it” [Girl]



A child is sitting inside a makeshift tent constructed from cardboard boxes and fabric on a grassy lawn. The tent is supported by wooden poles and has a red fabric on the left side. The child is wearing a blue and white striped shirt and is looking towards the camera. The background shows a green lawn, trees, and a brick building.

Natural play at home

- Replayed activities at home
- Social skills – Sharing knowledge with siblings and friends
- Children built on their knowledge in their own time outside school



Discussion

- Evidence suggests that Forest School helped to develop children's:
 - Confidence
 - Social skills
 - Knowledge and understanding of the natural world
 - Connection with the natural environment





Discussion

- Initial results are encouraging but more data needed on impact of Forest School in UK
- Our study suggests that Forest School within our community and school woodlands, **can offer opportunities for children to connect with the nature, influencing activities and learning beyond the sessions...and** starting to impact on their families,
- Childhood experiences influence connectedness with natural environment in later life (Bixler et al., 2002)
- Is it enough to create accessible woodlands and green space - do we need to do more to help communities connect?

Acknowledgements

- Natural England funded this study through the Natural Connections National Pilot Project in The Mersey Forest
- Forest School Initiative Lancashire for running the sessions



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