

# **‘Such enthusiasm – a joy to see’**

## **An evaluation of Forest School in England**

October 2005



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## Executive Summary

This report describes evaluation work undertaken by **nef** (new economics foundation) and Forest Research looking at Forest School in England. It outlines what Forest School is, how it came into being in Britain and what children do at Forest School. The report also presents findings from a longitudinal evaluation of three case study areas in Worcestershire, Shropshire and Oxfordshire, with some additional reference made to a Forest School setting in Somerset.

Phase 1 of the project undertaken in Wales in 2002/3 developed innovative evaluation tools and compiled evidence demonstrating for two groups of children a link between a range of physical activities carried out in a Forest School environment and six specific, positive outcomes ('propositions') that relate to an increase in self-esteem, an ability to work with others, learning about the outdoors, developing a sense of ownership of the environment, providing motivation to learn and increasing knowledge and skills.

Phase 2 of the work, which is the basis of this report, built on the lessons from Phase 1 and applied them to three different case study areas in England tracking twenty-four children over approximately eight months. The aim was to explore whether and to what extent the benefits and impacts identified in the Welsh Forest Schools could also be observed in other settings.

As well as findings, this work was equally concerned with process. The self-appraisal or 'participatory evaluation / action research' approach taken in this study is outlined in detail. It was important for the success of the evaluation that the various stakeholders in the Forest School settings (including Forest School Leaders, teachers, parents and pupils) were involved at all stages of the evaluation process. Not only was this in order to maximise the benefits of their knowledge and experience of the children, but also so that there was a significant opportunity for them to take ownership of both the evaluation process and the findings.

One of our aims is to show that measuring need not just be a counting exercise for the benefit of justifying our activities to outsiders (and therefore often an extra burden on a busy schedule), but can be a planning and management tool that, when embedded into the day-to-day routine of the Forest School, becomes a force for enhancing performance, and maintaining the motivation and inspiration of the practitioners that is so vital for the ongoing success of the projects they run.

It is for this reason that the focus of this approach has been to concentrate on the potential for positive outcomes of Forest School, very much in the spirit of what is known as 'appreciative inquiry'. Whilst acknowledging that learning for practitioners comes also from analysis of where things have gone wrong, this appreciative approach provides a way to challenge our usual emphasis on searching out problems, which can sometimes stifle our ability to see beyond them to the better world we are trying to create. With this work we are advocating a method not only for gathering

information and learning, but using evaluation as a way to inspire the energy and the confidence of the people involved.

Rather than just focusing on a range of physical activities carried out in a Forest School environment, this study identified a number of **key features** of Forest School that cut across all the settings that were involved in both Phase 1 and 2. These are the things that are not in themselves unique, but when used in combination set Forest School apart from other outdoor learning experiences. Broadly these features can be described as follows:

- **The use of a woodland (and therefore 'wild') setting** that is framed by strict safety routines and established boundaries that allows the flexibility and freedom for child-initiated (not only issue-led) learning and other innovative approaches to learning to take place in a low-risk environment. This woodland setting is important particularly for children from areas of the country where there is little opportunity for contact with the natural environment.
- **Learning can be linked to the national curriculum** and foundation stage objectives whilst setting those objectives in a different context, and it is not focused just on the natural environment. By incorporating innovative approaches to learning (such as undertaking small and easily achievable tasks) children are encouraged to develop their innate curiosity and motivation to learn. This is particularly important for those who find it difficult to assimilate knowledge in a strictly 'classroom' environment.



Working together *Helen Howes*

- **The freedom to explore using multiple senses** is fundamental for encouraging creative, diverse and imaginative play. The focus is on the 'whole child' (not just their academic ability) and how they can develop their own learning styles at their own pace whilst maximising the benefits from each experience they discover for themselves.

- **Regular contact for the children over a significant period of time** (e.g. all year round, in all weathers). Regular can mean anything from fortnightly during a school term to one morning, afternoon or day every week for twelve months or more. This is coupled with a clear set of safety routines and boundaries that allow children to develop a responsible attitude to risk whilst becoming familiar and confident enough to explore and interact with an ever-changing natural environment.

- **A high adult to pupil ratio** (e.g. Groups are small with approximately twelve children per session) allows for children to undertake tasks and play activities that challenge them but do not put them at undue risk of harm. It also allows practitioners quickly to get to know the individual learning styles, abilities and characteristics of the children in their charge.

This study builds on the six specific, positive outcomes identified in the Welsh study and presents the findings under **eight themes** that emerged from the analysis of the data collected from the four Forest School settings involved. These themes can be summarised under the following headings:

### **1. Confidence**

This was characterised by self-confidence and self-belief that came from the children having the freedom, time and space, to learn, grow and demonstrate independence.

### **2. Social skills**

The children demonstrated an increased awareness of the consequences of their actions on other people, peers and adults, and acquired a better ability to work co-operatively with others.

### **3. Language and communication**

The children developed more sophisticated uses of both written and spoken language prompted by their visual and sensory experiences at Forest School.

### **4. Motivation and concentration**

This was characterised by a keenness to participate in exploratory learning and play activities as well as the ability to focus on specific tasks for extended periods of time.

### **5. Physical skills**

The children developed physical stamina and their gross motor skills through free and easy movement round the Forest School site. They developed fine motor skills by making objects and structures.

### **6. Knowledge and understanding**

Increased respect for the environment was developed as well as an interest in their natural surroundings. Observational improvements were noted as the children started to identify flora and fauna, and they enjoyed the changing seasons.

### **7. New perspectives**

The teachers and practitioners gained a new perspective and understanding of the children as they observed them in a very different setting and were able to identify their individual learning styles.

### **8. Ripple effects beyond Forest School**

The children brought their experience home and asked their parents to take them outdoors at the weekend or in the school holidays. Parents' interest and attitude towards Forest School changed as they saw the impacts on their children.

## **Summary of Conclusions and Recommendations**

The above themes were generic to the data collected from the three case study areas in Worcestershire, Shropshire and Oxfordshire as well as in the additional material obtained from the setting in Somerset.

It is clear that some of the children displayed changes in behaviour that surprised the practitioners. Of course interventions of this nature do not occur in a vacuum; there will always be other influences on the ways children's behaviour can change over time. However, according to the views of the practitioners, teachers and parents who contributed evidence, the changes they describe amongst the children in this study could be attributed to their involvement with Forest School.

It is evident that for many children it takes time for the changes to occur; they need to become familiar with Forest School and gain confidence, and that can take many weeks or months. We emphasise the importance of the Forest School ethos that highlights the importance of long term and regular contact with the woodland environment.

We suggest in the recommendations that Forest School should be used on a wider basis as a vital part of children's outdoor learning experience, but that to achieve this Local Education Authority support is crucial for effective Forest School provision. The role of Forest School in children's physical development has health implications and should not be overlooked.

Contact with the outdoors is often limited for many children in modern society and the vital experience of using the outdoors and being comfortable in nature is being lost. Forest School is one of the ways in which this issue can be addressed. We also highlight that Forest School can contribute to four of the five outcomes that are part of the *Every Child Matters Framework* (DfES, 2004), identified by children as key to well-being. These are:

- 1) Be healthy
- 2) Stay safe
- 3) Enjoy and achieve
- 4) Make a positive contribution.

In terms of process, the very idea of self-appraisal (as advocated in the research approach used in this evaluation) has been demonstrated to be an effective method for practitioners to gain an understanding of best practice in a way that allows for immediate and effective feedback enabling them to shape the day-to-day delivery of Forest School. At the same time stakeholders in each of the case study areas reported that employing this 'action research' focus was a very useful way to learn from each other about the benefits, impacts and problems of running Forest School.

We go on to suggest that the Forest School setting itself can be seen as a useful formative evaluation tool for practitioners understanding and assessing a child's skills, abilities and characteristics and identifying how these can change over time.

## Who the report is for

This report is aimed at three main groups concerned with education. They are:

- Teachers, education practitioners and Forest School Leaders who are familiar with the setting and who are keen to reflect on their own best practice and learn from that of others
- Policy officers from education authorities and environmental organisations deciding the extent to which they should invest in Forest School settings for delivering their own missions and goals
- Education policy makers, and environmental organisations aiming to promote and support Forest School as a mainstream tool for education

This Phase 2 Forest School Evaluation undertaken by Forest Research and **nef** (new economics foundation) focussed on collecting data for the two elements of **process** and **content**. When we talk of 'process' we are referring to the self-appraisal methodology, in terms of the rationale and the practicalities and usefulness for Forest School practitioners. When we talk of 'content' we mean the *findings* or changes observed for the people (practitioners, teachers, parents and pupils) who take part and who have some first hand or vicarious experience of Forest School.

The findings from this study will be of general interest to all three audiences, whilst at the same time we appreciate that each audience will particularly want to focus on a different element. For this reason the evaluation had three goals:

1. To test the self-appraisal tools
2. To demonstrate the effects of Forest School
3. To reflect on the wider implications of self-appraisal

### 1. Testing self-appraisal tools (*Process*)

This was about building on the work of Phase 1 in Wales by trying and testing whether the self-appraisal templates and processes developed there could be transferred to similar settings in England. The first report (Murray, 2003)<sup>1</sup> was about acknowledging what is generic about the Forest School setting or 'ethos', whilst at the same time being able to identify what was unique about each particular project. The purpose of Phase 2 was not only to see whether practitioners were able to tell a convincing and useful story about what was happening, but also whether such ongoing action research (observation and ongoing reflection) was a practical and useful approach to delivering Forest School that should be encouraged across the country.

### 2. Demonstrate the effects of Forest School (*Content*)

The second goal was concerned with the data itself. Each setting undertook to collect and analyse their own data, not only with the view to proving the effects to outsiders (although by taking part in this study this was one of their desired outcomes), but

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<sup>1</sup>Forest School – A Study in Wales (nef, 2003) is downloadable from [http://www.neweconomics.org/gen/z\\_sys\\_publicationdetail.aspx?pid=179](http://www.neweconomics.org/gen/z_sys_publicationdetail.aspx?pid=179)



equally to improve their own practice by acknowledging the successes they were witnessing and endorsing or challenging the assumptions they were making about the effectiveness of their particular project. In addition nef and Forest Research have collected and collated the various findings from each of the pilots and aggregated themes and issues in an attempt to paint a more general picture of Forest School. It is this secondary analysis that forms Part 3 of this report.

### **3. Reflect on wider implications of self-appraisal**

The third goal, in the light of 1 and 2, was to reflect on the implications of both the process and the content (findings) as a result of undertaking self-appraisal; in particular for promoting and embedding Forest School across the country. There are currently discussions underway amongst many of the bodies involved in Forest School promotion and delivery about how best to manage the expansion and support of the setting as a mainstream teaching method. It is our hope that those discussions can be informed by the experience of the researchers and practitioners who have embraced the self-appraisal process and contributed to the substance of this report.



Family barbecue

*Photograph Helen Howes*

# Part 1: Introduction

## Where does Forest School come from?

The development of Forest School began in Britain in the mid-1990s; it is based on a Scandinavian idea that considers children's contact with nature to be extremely important from a very early age. Forest Schools were developed in Scandinavia in the 1950s and focused on teaching children about the natural world. Nursery Nursing students from Bridgwater College in Somerset visited Denmark in 1995 to see for themselves what was taking place. They decided that the approach was appropriate for use in Britain and considered how to apply what they had witnessed to childcare provision in the college's Early Years Centre. Since then Forest School has spread to many areas as educationalists have witnessed the impact that it can have on children: improving their confidence and self-esteem. Many are convinced that Forest School is important but it was realised that evidence would be needed to identify impacts and show changes that occur in the children who attend.

The schools who participate are looking for a range of development and improvements in the children who go to Forest School including:

- Creative development
- Physical development
- Maths development
- Communication, language and listening
- Personal, social and emotional development
- Knowledge and understanding of world.

The above may come about as a result of child-initiated or child-led activity or adult-led or adult-initiated activity; Forest School can accommodate these different approaches. Some of the activities undertaken require the children to work as a whole group or in small teams while at other times they work independently. Appendix 1 shows a Shropshire school early years lesson plan that outlines the aims of a specific session, the intended learning and planned activities that will take place for a particular trip to Forest School.

## Forest School in the United Kingdom

There are an increasing number of Forest Schools in the United Kingdom. Some of these are privately run, while others are supported by Local Education Authorities and others come about within the Forest Education Initiative (FEI)<sup>2</sup>. The Forest Education Initiative was set up in 1992, it is a partnership between the Forestry Commission, Woodland Trust, Tree Council, British Trust for Conservation Volunteers, Groundwork, ConFor, Timber Trade Federation, Community Forests, Field Studies Council. FEI's aim is to:

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<sup>2</sup> The FEI website [http://www.foresteducation.org/forest\\_schools.php](http://www.foresteducation.org/forest_schools.php) provides information on what FEI is, where there are local cluster groups, and provides learning resources that have been written by teachers and that can be used to develop knowledge and skills across a range of curriculum subjects.

*Increase the understanding and appreciation, particularly among young people, of the environmental, social and economic potential of trees, woodlands and forests and of the link between the tree and everyday wood products.*

Practical work is undertaken through FEI by voluntary cluster groups who deliver projects at a local or regional level. These groups are independent and led from within communities which means that they can respond to the needs and opportunities of their particular locality. FEI co-ordinators support cluster groups with advice, contacts and outline available funding options that projects can apply for if they meet certain criteria. These projects might include developing woodland settings in school grounds, theatre production, wood tour bus visits to schools and producing teaching packs about local trees, forestry and forest industries.

One project that FEI is increasingly delivering is Forest School. We need to qualify here that not all Forest Schools have links or connections to FEI. Therefore there is not a single approach to Forest School, many have been set up through enthusiastic individuals who see the potential benefits for children from this experience. The Forestry Commission contributes funding to FEI along with the other partners, and Forestry Commission England is helping to develop the Forest School Network in England through funding a part time Forest School co-ordinator.

### **What is Forest School?**

As interest developed in Forest School an England network was set up in 2002 to meet and discuss the priorities, the criteria that ensure good safety practice, and what makes Forest School special. The definition developed by the network is that:

*Forest School is an inspirational process that offers children, young people and adults regular opportunities to achieve, and develop confidence and self-esteem through hands-on learning experiences in a woodland environment.*

Whilst this definition is helpful, there are several key aspects to Forest School (highlighted by this study and others) that differentiate it from many other outdoor education activities and approaches. Even though some of these individual aspects (we call them *features*) outlined below are not unique to Forest School, when brought together they provide an experience for the child that they would not get elsewhere. This is key as it emphasises how Forest School is different and why it is important in terms of the positive effects it can bring about for children.

Broadly these features can be described as follows:

- **The use of a woodland (and therefore 'wild') setting** that is framed by strict safety routines and established boundaries that allows the flexibility and freedom for child-initiated (not only issue-led) learning and other innovative approaches to learning to take place in a low-risk environment. This woodland setting is important particularly for children from areas of the country where there is little opportunity for contact with the natural environment.
- **Learning can be linked to the national curriculum** and foundation stage objectives whilst setting those objectives in a different context, and it is not focused just on the natural environment. By incorporating innovative approaches to learning (such as undertaking small and easily achievable tasks) children are encouraged to develop their innate curiosity and motivation to learn. This is particularly important for those who find it difficult to assimilate knowledge in a strictly 'classroom' environment.
- **The freedom to explore using multiple senses** is fundamental for encouraging creative, diverse and imaginative play. The focus is on the 'whole child' (not just their academic ability) and how they can develop their own learning styles at their own pace whilst maximising the benefits from each experience they discover for themselves.
- **Regular contact for the children** over a significant period of time (e.g. all year round, in all weathers). Regular can mean anything from fortnightly during a school term to one morning, afternoon or day every week for twelve months or more. This is coupled with a clear set of safety routines and boundaries that allow children to develop a responsible attitude to risk whilst becoming familiar and confident enough to explore and interact with an ever-changing natural environment.
- **A high adult to pupil ratio** (e.g. Groups are small with approximately twelve children per session) allows for children to undertake tasks and play activities that challenge them but do not put them at undue risk of harm. It also allows practitioners quickly to get to know the individual learning styles, abilities and characteristics of the children in their charge.

Currently in the UK Forest School is being used with a range of groups from early years children to those with special needs (e.g. Speech and language difficulties) or young people and adults with emotional and behavioural difficulties. The Forest School setting is adaptable and allows for a flexible and innovative approach to learning to be undertaken which can accommodate a range of learning styles.

### *Accommodating Learning Styles*

When we talk of learning styles, these are the different ways that people best absorb and process information, such as kinaesthetic (learning by doing), linguistic, interpersonal, mathematical and visual learning. Gardner (1983) developed the theory of multiple intelligences which emphasises that there are many different ways of learning and highlights that some children have a preferred *learning style*. The theory suggests that an individual processes information using these different forms of intelligence in varying degrees. The British Educational Communications and Technology Agency (BECTA, 2005) have suggested that learning styles are only one of a range of factors that relate to how children react to learning opportunities and that no model of learning styles is universally accepted. They state that:

*Offering learners a variety of ways of engaging with content does seem to be beneficial in terms of both outcome and motivation (Becta, 2005: 4).*

Forest School is an approach that can allow practitioners to shape teaching methods to an individual's learning style. Research in America (Taylor, 1998; Fjortoft, 2004) suggests that children who play in natural environments undertake more diverse, creative and imaginative play and this is an important part of a child's development.

### *Training and Quality Assurance*

Teachers, support assistants, nursery nurses and others can train as Forest School practitioners at a number of different levels, depending on whether they want to lead sessions or support others who are leading them<sup>3</sup>. There are also opportunities for people to be trained so that they can then train others as Forest School Leaders. A feasibility study was recently undertaken looking at how a Quality Assurance Scheme for Forest School might be set up and what it should include. Discussions about quality assurance arose because of a range of concerns including how Forest School is run by different groups, ideas about what Forest School is as well as issues about standards and liability.

Because of these issues FEI commissioned a contractor to explore the place of quality assurance and how a scheme might be set up in order to address some of the above concerns. A consultation document was produced by FEI called 'Outline proposal for a Great Britain Forest School Quality Assurance Scheme'. If the scheme is set up then a Forest School could work towards accreditation as an approved Forest School. If they achieved accreditation this would show, for example that they had a range of systems in place such as risk assessments, appropriate leader training, criminal record bureau clearance for those working with children and an appropriate environmental assessment of the site. Responses to the consultation are currently being collated.

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<sup>3</sup> FEI provide information about training and cluster groups on their website (FEI, 2005)

## What happens at Forest School? - A day in the life of an Early Years visit

A typical session starts with the practitioners who are often either teachers or Forest School Leaders planning what is to take place. They will consider beforehand the changes in behaviour they might expect to see in the children as a result of the activities they organise. The children get into their outdoor clothing (waterproofs and wellingtons) and are taken by minibus to the woodland site with the practitioner and assistants. Some schools are lucky enough to have a woodland that is within walking distance of the school. After parking the minibus the children walk to the site. Stops maybe made along the way if a child notices something such as a rabbit hole, and this can lead to an impromptu lesson on wildlife and habitats.

Once children become familiar with the site they may run and lead the way to the Forest School site, so whilst they are learning to deal with the uneven terrain of the woodland floor they are also developing a sense of independence and confidence in being outdoors.



Hiding in a den

*Helen Howes*

A later session for certain groups of children with several weeks' experience of Forest School might include learning how to build a fire on which to roast marshmallows. If this is the case the children, who will all have been assessed as capable of acting responsibly around fire, will be briefed on what they are going to do, with the safety issues being discussed in detail.

They will be told that they need to gather firewood, and the practitioner will discuss which type of wood burns best by showing examples of green and dead wood. The children will be asked to find three different lengths and thicknesses of wood to start the fire, which leads them to practise their mathematical skills as they add and subtract different twigs and try to assess their thickness and dryness.

These activities also allow the children to develop linguistically because they are describing what they are doing as well as talking about the feel and appearance of the twigs they are collecting (e.g. having to describe whether they are wet, dry, long, fat or thin.) In this way the children will work together to collect enough of the right sort of wood. In addition the children may then be directed with the help of an adult to use a penknife to whittle long sticks into a point for holding their marshmallows over the fire. Again there is likely to be a discussion of what type of stick is needed to toast a marshmallow (e.g. one that is bendy so that it does not burn easily and one that is almost as long as your arm) again providing opportunities for developing their use of language. The children will also learn about safe behaviour around the fire area and the concept of melting points.



The success of the session depends a great deal on the skill of the Forest School Leader or teacher who is able to identify and capitalise on the many and varied opportunities for learning that emerge from undertaking a straightforward activity like building a fire.



Sitting by the fire *Helen Howes*

For groups of children for whom working with fire is not deemed appropriate, a session may be based around another theme such as 'holes in the ground' or 'spiders' webs'. Again exploration of the area in search of examples will be encouraged, along with discussions on how and why different creatures use holes, or how spiders catch food. Opportunities for group and creative activity arise when children are invited to make their own spiders' webs with the natural materials they find around the site.

As the children start to become more familiar with the idea of learning in this classroom in the woods such a session might cover other curriculum subjects such as numeracy and literacy as children are encouraged to document their experiences on site or back in the classroom.



'See-saw'

*Helen Howes*

During the walk back to the minibus at the end of the session many of the children will be quite tired after their physical exertions; but over a series of regular sessions their stamina, balance and co-ordination will improve. The whole experience excites and inspires the children and there is often plenty of laughing and fun to be had.

## Context for this evaluation

It is clear from a description such as this that any evaluation of the effects of an experience like Forest School on a group of children will take a lot more than just counting easy-to-measure targets and outputs. The Forestry Commission approached **nef** in 2002 to discuss a project that would explore and develop ideas of how to evaluate the wider impacts of Forest School. In order to do this **nef**<sup>4</sup> with support from Forest Research<sup>5</sup> (FR) developed a **two-phase project**.

### *Phase 1*

This part of the work was undertaken in 2002/3 and developed innovative evaluation tools and compiled evidence demonstrating for two groups of children the progress towards six specific positive outcomes. The initial work focused on developing the hypothesis or 'theory of change' about how Forest School has an impact on the children involved. **nef's** work and ethos is participatory and so central to the approach was the idea of bringing together Forest School Leaders, teachers, community representatives in two case study areas in north and south Wales to explore what Forest School involved and what impacts it had on the children both short term, medium and long term.

This participatory approach allowed the vital knowledge of those who witness how children respond to Forest School to identify what they believed were the important changes to children from having contact with this approach. These changes were summarised in six propositions that described what the practitioners believed those important changes were. They were that Forest School:

- Increases the self-esteem and self-confidence of individuals who take part
- Improves an individual's ability to work co-operatively and increases their awareness of others
- Counters a lack of motivation and negative attitude towards learning
- Encourages ownership and pride in the local environment
- Encourages an improved relationship with, and better understanding of, the outdoors
- Increases the skills and knowledge of the individuals who take part

By giving these propositions the status of 'stated objectives' the practitioners from the Welsh study were able to use them as the basis for a self-appraisal methodology in the form of prompts on a recording template against which weekly observations could be tracked and recorded. A report from this work describes the stages of the project and what it found; it is available on both the **nef** and FR websites (**nef** and FR, 2005).

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<sup>4</sup> **nef** is an independent think tank whose aim is to improve quality of life by inspiring and demonstrating real economic well-being. See [www.neweconomics.org](http://www.neweconomics.org) for more details.

<sup>5</sup> Forest Research is the research agency of the Forestry Commission.



## *Phase 2*

Phase 2 provides the focus of this report. This part of the evaluation was undertaken to explore further the propositions identified in Phase 1 and to build on the lessons learnt from undertaking a self-appraisal methodology in three different Forest School settings in England. Forest Research worked more closely in partnership with **nef** in Phase 2 of the work. The key difference was to track a small group of selected children over a number of months to explore in more depth any changes, for example, in their self-esteem or physical development skills. Three case study sites were chosen for the pilot evaluation. Initially these were for two Early Years groups in Oxfordshire and Worcestershire, and a Forest School in Burnworthy, Somerset that was to focus on the effects for a group of teenagers who were deemed to have emotional and behavioural difficulties (EBD).

Although all three were able to undertake the initial stage of the evaluation methodology, (a participative Storyboard exercise) time constraints meant that it was difficult for the practitioners in Somerset to attend the subsequent pilot group meetings and therefore use the self-appraisal methodology as part of this study. However, an additional Forest School Early Years programme from Shropshire joined the pilot group in the autumn of 2004. In total, the practitioners involved **randomly selected** twenty-four children from seven school settings.

Before contact time in Forest School began for the pupils involved, a group of Forest School practitioners and Early Years co-ordinators from Local Education Authorities associated with the pilot areas in Oxfordshire and Worcestershire were brought together to discuss whether the six propositions developed in the Welsh study should be used in England or whether they should be adapted. The evaluation process allowed for slightly altered propositions to those used in Wales to be chosen and so the children were tracked over several months between 2004 and 2005 with each group of practitioners using their own propositions or 'stated objectives' as prompts for their observations.

The rest of this report is divided into three sections covering **Methodology** (*Process*) and **Research Findings** (*Content*) and finishing with a discussion of **Conclusions and Recommendations**. It describes in detail the approach that was taken, the findings of Phase 2 of the evaluation and sets out an approach that can be taken by others who would like to evaluate the impact that their Forest School has on children in their area. The report also describes examples of self-appraisal tools (reproduced in the appendices) and suggestions for some ways of working with stakeholders.

## Part 2: Methodology

### Rationale for a different approach to evaluation

#### *Measuring what matters*

For nef and Forest Research evaluation is about attempting to measure what is important, and not just measuring the things that are easy to count. This gives evaluation a focus that is different from traditional approaches that look mainly at targets and outputs, to the desired outcomes and longer-term impacts of a project or intervention.

When we speak of evaluation in terms of identifying the achievement of desired outcomes resulting from an organisation or project's activities, these should link directly to the long-term vision or mission that underpins everything the people who are involved are trying to achieve and that they believe passionately about.

If an evaluation by the way it is conducted and the things it focuses on loses sight of this passion, then it can in some extremes detract from the potential achievements of the original intervention. For example the necessity for a hospital to measure their performance against targets for the number of patients seen can compromise the quality of care by restricting the amount of contact time between the healthcare professionals and their patients.

A good example of this was seen as part of Groundwork's evaluation of Barclay's Sitesavers projects – involving local people in improving their neighbourhoods (Walker et al. 2000). Of course at one level the aim of these projects was to clean up a park or a playground to reclaim an open space from the fly-tipper and the drug dealer. However some of the important long-term effects were to do with the way that the cleaning-up activities brought people together, gave them new skills and inspired confidence in them to take further action to improve their quality of life and forge stronger links within their communities. Just counting how many trees had been planted, or how many people had been involved would not have revealed these effects. What they were looking for was evidence of a process taking place, not just the achievement of a target.

#### *Measuring to add value*

A measuring process that is conducted in a comprehensive, transparent and participative way can contribute positively to the aims of a project by ensuring, for example, that the people involved take ownership of the process, realise the effects that they are having and heed the lessons that they discover for themselves by their own inquiry.

In the Groundwork / Barclays Sitesavers example described above the evaluations were focussing on the changes that were taking place for people in a neighbourhood as a result of a particular project. They quickly discovered that by project officers

talking to people, and then local people talking to each other, they not only proved to themselves and to others that these changes were happening, but found that the very act of inquiry was making them happen even more.

#### *Action research*

Effective evaluation is important, even beyond its function in justifying to a funding body that the money is being well spent. The learning, inspiration and confidence that can come from those responsible or involved in a project knowing that they have, and can, make a difference is as vital to a project's sustainability as the next funding opportunity.

Because of the special nature of the changes that champions of Forest School claim that the setting brings about (i.e. ones that are not easily described in quantitative terms of targets or countable outputs) this report advocates a distinctive formative and participative approach to measurement as an effective way to tell the whole story.

The approach undertaken is closely aligned with many of the principles of Action Research, particularly in the way that the emphasis is on '*a full integration of action and reflection and on increased collaboration between all those involved in the inquiry project*'. The measuring process is more about the '*formation of a communicative space*' rather than just a snapshot taken and owned by the objective researcher (Marshall and Bradbury, 2003).

#### *An appreciative approach*

**nef**'s work developing and promoting techniques for enhancing the quality and quantity of stakeholder participation in decision-making has highlighted the benefits of taking what is known as an *appreciative approach* to planning and managing change. As such, it advocates describing goals for achievement based on existing experience of success as a way of bringing about positive change. Put very simply; creating a positive reality by the way that reality is described.

Appreciative Inquiry (Elliot, 1999) in its original form is an organisational development framework for asking affirmative-based questions that change behaviour. It challenges the traditional problem-solving approach to change that views systems as faulty machines with parts needing to be fixed or replaced and instead encourages the view that an exploration and affirmation of what works in a system – literally its 'life-giving' properties – is a more effective and sustainable way for fulfilling potential and maximising effective performance.

When it comes to evaluation, a methodology that is wholly concerned with providing *hard evidence* of the effectiveness of an intervention could be described as flawed if it only looks for the things that are working. However, if the goals for measuring include a *commitment to improve, inspire and motivate* people towards positive change (very often encapsulated in the mission and values underpinning their actions) then a clear and shared understanding and statement of the potential

outcomes and positive impacts need to be established at the beginning of the evaluation. This is not only important for choosing indicators of success, but vital for sustaining the interest and ownership of the process - the energy for change.

It is for this reason that the focus of this study has been to concentrate on the potential for the positive outcomes of Forest School. Whilst acknowledging that learning for practitioners comes also from analysis of where things have gone wrong, we are advocating here a method not only for gathering information and learning, but using evaluation as a way to inspire the energy and the confidence of the people involved.

## **Evaluating Forest School**

### *Self-appraisal*

When it comes to evaluating by observation the way children participate in Forest School, it is the practitioners (particularly the Forest School Leaders and Teachers) and those closely associated with the children (Parents and Carers) who are best placed to collect information, as they are the ones who are most likely to notice and understand the more subtle of the changes that are taking place.

This is why **nef** and Forest Research's evaluation of Forest School has focused a great deal of energy in both phases of this study on developing and encouraging the use of a self-appraisal toolkit for Forest School practitioners so that they can measure not only *if*, but understand *how* and *why* what they are doing brings about the positive effects that they believe can result from their endeavours. It is an approach that is not only about proving, but improving as well (Sanfilippo et al. 2005)<sup>6</sup>.

The self-appraisal methodology developed as part of Phase 1 and used in Phase 2 of this research was designed to equip those who are in the best position to collect information, and so needed to be flexible and easily assimilated by the practitioners into the daily routines of the Forest School sessions that they ran. The resources and the amount of time available to manage these opportunities necessarily dictated to what extent each of the tools were useful for data collection. The trade-off was that the findings could lack the degree of objectivity that an outside consultant could bring to an evaluation. Often, however, the best opportunities for evaluation would occur when it would be difficult or expensive for outside evaluators to be involved; in this case when they were undertaken regularly at weekly sessions over an extended period of two to three school terms.

### *The role of the researchers from nef and Forest Research*

The three-stage methodology was designed primarily as a learning exercise for the practitioners in a Forest School. However, one of the aims of this study was to aggregate the findings from each self-appraisal exercise so that the researchers

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<sup>6</sup> See [www.proveandimprove.org](http://www.proveandimprove.org) for more details on **nef**'s work on evaluation

from **nef** and Forest Research could undertake their own analysis of those changes observed by the practitioners.



Discussion workshops for practitioners

Liz O'Brien

For the purposes of this pilot and for producing this report, the researchers provided extra support to the practitioners in the pilot groups over the period that they were recording their findings. This support took the form of three, one-day training and discussion workshops which were undertaken throughout the year, providing opportunities to compare findings and share the learning from their experiences.

Even though each pilot was looking for slightly different outcomes and collecting data in different ways (e.g. using alternative models for recording templates), it was possible for the researchers to aggregate the findings by collating the practitioners' comments on behaviour from each session for each group and drawing connections between results from the different pilots. The researchers also prepared short written summaries incorporating the baseline positions and progress towards fulfilment of the propositions for each child in the study. These were compiled from a cursory yet objective behavioural analysis of the practitioners' notes captured after each Forest School session.

### **Outline of the self-appraisal methodology for Forest School**

Phase 2 of this research started in the summer of 2004 and built on the work undertaken in Wales by involving a number of Forest School settings in England in a self-appraisal evaluation process using a range of tools developed as part of Phase 1.

The methodology follows a three-stage cycle covering *hypothesis, evidence and review*. The stages can be summarised in terms of the tools that can be used for each:<sup>7</sup>

1. **Storyboard** – a participative exercise for practitioners and other project stakeholders to establish the propositions and underlying ***hypothesis*** for their particular Forest School and to choose the indicators and ways to collect data to demonstrate it happening,
2. **On-site Data Collection and Analysis** – using self-appraisal recording templates developed by the practitioners in such a way as to be appropriate for their own situation. These were designed in order to record and track

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<sup>7</sup> Each of the three parts of the self-appraisal toolkit are described in Appendix 7.

observations 'in the field' of **evidence** of the changing behaviour of children in the study in relation to their original hypotheses,

3. **Reflection Poster** – another participative exercise (again involving practitioners and other stakeholders) to **review** and acknowledge the changes that may have taken place and learn from their experience of the process of delivering Forest School. In addition the evaluating practitioners, wherever possible, collected additional feedback from parents, teachers and the children themselves in the form of self-completed questionnaires or informal interviews.

Throughout the evaluation the practitioners were encouraged whenever possible to take a participatory approach to data collection, not only in the discussions with a range of stakeholders in Stages 1 and 3, but also in Stage 2 by encouraging the Forest School Leaders and teachers to take a central role in undertaking the weekly observations and detailed recording of the changes in behaviour they noticed amongst the children in each study group.

### **Outputs from the three-stage methodology**

Undertaking the three stages using the tools meant that the recording practitioners were able to build up a multi-layered picture of what was happening in Forest School. For this particular study in England each stage provided for the Forest School recording practitioners (and for **nef** and the Forest Research researchers) a combination of one or more of the following possible outputs:

1. As a result of undertaking a **Storyboard** exercise the evaluating practitioners were able to produce:

- A detailed impact map or 'theory of change' flow diagram, that established the causal link between the activities and ethos of a particular Forest School and the changes that it aims to bring about.
- A set of **propositions** describing the generic learning and behavioural outcomes resulting from an individual's experience of Forest School. These propositions are essentially **positive statements** of what practitioners believe their particular Forest School can achieve, and are rooted in their existing experience of the setting.
- Data-recording templates divided into headings or 'prompts' (based on the chosen propositions). These are laid out in a format for collecting information on progress of the individual members of the school group towards these outcomes. It was up to the practitioners to choose the most suitable layout for collecting their observations.<sup>8</sup>

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<sup>8</sup> Examples of the various templates used for this study can be seen in Appendix 7.2

2. Having undertaken regular on-site data collection using the self-appraisal recording templates, the practitioners and researchers had at their disposal for analysis:

- Weekly observations recorded against each **proposition** (sometimes scored in comparison to a baseline) tracking progress over time for each child in the study.
- A Master Sheet (which could be reproduced by **nef** and Forest Research as an MS Excel Spreadsheet) on which the weekly observations for each individual participant are collated, supplying precise (and date-referenced) descriptions of expected and unexpected as well as observations of positive and negative behaviour of the participants, as well as summarising background information on the session's activities and weather conditions.
- Also in this stage one of the pilots chose to use the standard Effective Early Learning (EEL) Programme 2-minute observation templates for each of the six children in their study.<sup>9</sup>

3. The Reflection stage provided the opportunity to look back over the project using one or more of the following tools:

- A self-facilitated workshop designed to involve practitioners, teachers and parents using an interactive **Poster** to reflect on the highs and lows of the project, and identify unexpected impacts and points of learning.<sup>10</sup>
- Informal interviews or questionnaires undertaken with parents and teachers not directly involved with Forest School collecting their observations of individuals' behaviour outside and attitudes towards Forest School.
- Informal interviews or questionnaires undertaken with Forest School participants themselves on attitudes towards Forest School

Each of the pilot projects approached these elements in slightly different ways, as their ability to fulfil the demands of each stage depended on the individual situations and resources available to each Forest School. The various findings from the self-appraisal exercise undertaken by the pilot groups were then collected together for further comparative analysis by **nef** and Forest Research.

### **Overview of the pilot study groups**

In total there were four pilots taking part in this English study. These were in Somerset, Oxfordshire, Worcestershire and Shropshire. Practitioners at the Somerset pilot (an Emotional and Behavioural Difficulties (EBD) group at Burnworthy

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<sup>9</sup> See Bertram T at <http://www.eddept.wa.edu.au/lc/pdfs/involvementworkshop.pdf> for a fuller summary on the use of the EEL Child Involvement Scale for observing behaviour

<sup>10</sup> Full instructions on using this tool can be found in Appendix 7.3

Forest School near Taunton) were unable to attend the pilot support workshops and so we focus primarily on data collected from the three remaining case study areas.

The Shropshire Forest School joined the pilot in the autumn of 2004, having missed out on Stage 1. By the end of the summer term (July 2005) the practitioners in the Oxfordshire pilot had by then been unable to undertake the reflection exercise that constitutes Stage 3. However they finished the school year fully intending to do so before the new term was underway in the autumn of 2005. Twenty four children were randomly chosen from the case study areas by practitioners and permission of the children's parents was sought for each of these children to be included in the study and tracked over approximately eight months in 2004/5.

### **How the methodology was used**

In summary, this meant that the following combinations of data were collected from four different pilot groups over the period of the study.

Storyboards were undertaken by:

- Somerset Pilot (with practitioners associated with Burnworthy Forest School, Taunton)
- Oxfordshire Pilot (with practitioners associated with the Northmoor Trust Forest School)
- Worcestershire Pilot (with practitioners associated with the Bishops Wood Centre Forest School)

On-site Data Collection and Analysis was undertaken by:

- Oxfordshire Pilot (Northmoor Trust Forest School)
- Worcestershire Pilot (Bishops Wood Centre Forest School)
- Shropshire Pilot (Cantlop Woods Forest School)

Reflection workshops were undertaken by:

- Worcestershire Pilot (Bishops Wood Centre Forest School) (13/4/05)
- Shropshire Pilot (Cantlop Woods Forest School) (27/4/05)

In addition, at the **Reflection** stage a number of self-completed questionnaires were obtained along with some informal parent, teacher and child interviews undertaken by practitioners from Oxfordshire and the Shropshire pilots. In all this meant that there was a triangulation of data through Storyboards (hypotheses), weekly collection of comments and scores (evidence), and reflection workshops, parents, practitioners and some children's comments (review).



## **How each pilot approached the evaluation**

### *Stage 1 - Storyboard (Hypothesis)*

In Oxfordshire and Worcestershire the practitioners were able to organise Storyboard workshops with a small number of the key stakeholders associated with the Forest School and the participating schools. As a result of undertaking this first stage of the methodology they were able to agree on the hypothesis, or 'story' behind their Forest School, particularly the potential changes that they expected their projects to achieve as a result of the activities they were planning to undertake. By identifying particular aspects that they viewed as important to their situation, they were able to form unique 'propositions' similar to those developed in the Welsh study, but appropriate for their Forest School. With these propositions as a basis, they then designed recording templates and a suitable methodology for collecting the information to demonstrate them happening.

In Somerset the initial Storyboard exercise was undertaken in October 2004 with the Forest School Leaders and three practitioners from the client EBD support organisation. The exercise was able to establish at the outset of the project their shared objectives of the planned intervention for the participants and provided a structure to the conversation about how what they were going to do would indeed bring about the benefits they hoped for.<sup>11</sup>

Ordinarily the Storyboard exercise is designed so that it can be run without the need for an outside evaluator. On this occasion the exercise was facilitated by Richard Murray from **nef**, and was combined with a visit to see the Forest School site being used.

Following the Storyboard exercises in the autumn, it was no longer possible for the Somerset pilot to attend the subsequent pilot group workshops. However, at the next meeting in October where the Storyboard findings were presented and analysed, practitioners representing Forest School in Shropshire joined the group of pilots in place of Somerset, thus making up the numbers for Stage 2 of the evaluation. The practitioners from Shropshire were able to align their aims and objectives for measuring with the group from Oxfordshire, and so decided to use the same data collection method.

### *Stage 2 – Data Collection and Analysis (Evidence)*

In the three remaining pilot groups the children's progress against each pilot's chosen propositions was tracked over several months as they regularly attended Forest School. The recording practitioners, who were either Forest School Leaders or teachers, used their own variations of the self-appraisal reporting templates developed in Phase 1 as part of the Welsh evaluation in order to score and make comments after each child's weekly or fortnightly visit, noting any significant changes in the way the individuals behaved. These weekly snapshots, when collated and

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<sup>11</sup> The key points from the Somerset Storyboard exercise are reproduced in Appendix 5

combined provided a rich thread of data for each individual pupil tracking their changes in behaviour and attitudes.

With the Oxfordshire, Worcestershire and Shropshire pilot areas completing Stage 2 of the evaluation, it meant that data was collected for twenty-four children over the period October 2004 until June 2005. The details for how each study group were made up are reproduced in Table 1. Appendix 2 shows more details of the pilots areas compared.

**Table 1: Pilot Group Details**

<b>Pilot Region</b>	<b>Worcestershire</b>			<b>Oxfordshire</b>		<b>Shropshire</b>	
<b>Name of Forest School site:</b>	Bishops Wood Centre	Cloughton	Westminster College	Foxcombe Woods	Cantlop Wood		
<b>Name of School:</b>	The Marlpool First School Speech and Language Unit	The Fairfield Community Primary School	Finmere School	Pegasus Nursery	New Hinksey School	Condover School	Pre-Longnor School
<b>Total number of pupils in each Forest School session</b>	10	12	16	10	12	8	17
<b>Type of group</b>	Mixed age group speech and language	Nursery Age	Key Stage 1	Nursery and Year 3	Foundation Stage	Foundation Stage	Foundation Stage and Key Stage 1
<b>Age Range of the group (years)</b>	5-9	3-4	4-7	3-5	3-5	3-4	4 -6
<b>Number of children in this study</b>	3	6 (3 in the AM group and 3 in the PM group)	3	3	3	3	3
<b>Names used in this study</b>	Jeremy F, Kelly G, Douglas L	Barry , Cherie-Lane, Frank, Hazel, Sheila, Angel	Merlin Christophers, Esta Acle, Justin Brannigan	Serena Stepley, Jeremy Winters, Leanne Donnington	Wayne, Chloe, Luke	Fiona Hestlethwaite, Erin Murphy, Justin Jacobs	Anthony Warne, Greg French, Lisa Matthews

While the Shropshire and Oxfordshire pilots used the templates to write comments on the children, Worcestershire devised a scoring system to track change with a score of 1 indicating no change, 2 indicating slight change and 3 highlighting dramatic change. Appendix 3 provides an example of this scoring system and of a recording sheet used in Worcestershire which includes background information for each session, and general session comments.

Appendix 4 shows the scores for one of the Shropshire children. Practitioners scored the pupils on a basis of 1 (not good) to 10 (very good) for each proposition which gives a quick indication of how the child has progressed over the weeks.

The data collected can be summarised as follows:

### **Worcestershire**

- Score of 1-3 (as outlined above) for each child undertaken weekly against each proposition
- Individual general comments on each child for each session

### **Oxfordshire**

- Baseline score at the start
- Individual comments for each child on each proposition after each Forest School session
- Some informal parent, teacher and child questionnaires undertaken

### **Shropshire**

- Baseline and subsequent scores done weekly for the first two terms; final score at the end of the summer session under study (Appendix 4)
- Comments for each child against each proposition each week
- 2 minute random moment observation (EEL) for each child each week

### *Stage 3 – Reflection and Questionnaires (Review)*

For the Reflection Poster workshop, the Shropshire and Worcestershire pilots were able to re-convene a similar group of practitioners and education officers to the group that undertook the Storyboard exercise at the start of the evaluation. For both groups the exercise provided an opportunity to take stock of the previous few months of Forest School activity and highlight the learning points for practitioners.

In addition some parents, teachers and pupils from the Oxfordshire and Shropshire schools filled in questionnaires relating to their experience and attitudes towards the Forest School experience. Although these were not representative samples, they provided helpful narrative and background for the assessments made of the weekly reporting templates.

## Part 3: Research Findings

The findings from this study are presented under the following headings:

- Storyboard Findings
- Propositions (What practitioners were looking for)
- The Evidence of Change (What the practitioners found)
- Review of the Features and Benefits of Forest School

### Storyboard Findings

The initial stage of the evaluation involved practitioners undertaking the Storyboard exercise. This was in order to clarify, in their own minds, the hypothesis for their particular Forest School project.

The exercise allows participants to focus on **eight questions** that, when answered together, describe the 'story' of their Forest School setting; literally their project's unique 'theory of change'.<sup>12</sup> Crucially questions **3** to **7** in the Storyboard exercise deal with that part of the story that identifies how people will know that the Forest School is having an effect.

3. *What initial results do you expect from the project?*
4. *What medium-term outcomes do you expect from the project?*
5. *What long-term outcomes do you expect from the project?*
6. *How will the initial results lead to the medium-term outcomes? (For every result, ask 'So What?' or 'Why is that important?')*
7. *How do the medium-term outcomes lead to the long-term outcomes? (For every outcome, ask 'So What?' or 'Why is that important?')*

Table 2 below shows an example of the comments recorded in response to Questions 3, 4 and 5 from when the stakeholders involved in the Worcestershire pilot carried out their initial Storyboard exercise.

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<sup>12</sup> The details of what happens in a Storyboard exercise and the eight questions that structure the conversation are reproduced in Appendix 7.

**Table 2: Storyboard Findings from Worcestershire**

<b>Worcestershire Pilot Group Storyboard Findings</b>	
<i>(Early years and older pupils from a cross-county Speech and Language unit)</i>	
<p><b>Storyboard Question 3.</b> <i>Initial results</i></p>	<ul style="list-style-type: none"> <li>▪ Increased use of <b>language</b> (with more opportunities for natural use of language)</li> <li>▪ Children becoming more <b>self reliant / independent</b></li> <li>▪ Forest School <b>routines</b> embedded</li> <li>▪ <b>Awareness</b> of themselves and others' personal space</li> <li>▪ Increased fine and gross <b>motor control</b></li> <li>▪ Children's increased <b>ability to plan and review</b> (e.g. choose resources for tasks)</li> <li>▪ Transferring skills (e.g. modelling the good practice of carrying sticks)</li> <li>▪ Children <b>want to learn</b></li> <li>▪ Children <b>want to come back</b> to Forest School</li> </ul>
<p><b>Storyboard Question 4.</b> <i>Medium term outcomes</i></p>	<ul style="list-style-type: none"> <li>▪ Children have increased <b>confidence in themselves</b> (their abilities)</li> <li>▪ Children develop a <b>bonding relationship</b> with peers and with staff (Forest School Leaders / teachers)</li> <li>▪ Visible improvements to children's: <b>memory; physical development; health; use of language</b> (speech and language group)</li> <li>▪ Children <b>feel special</b> (leading to raising self-esteem)</li> <li>▪ <b>Parents take more interest</b> in Forest School due to children's enthusiasm</li> <li>▪ Parents take their children out into the 'outdoors' more (parents have a different perception of the outdoors – e.g. the perceived risks)</li> <li>▪ <b>Comparable difference</b> between children's behaviour in normal setting (indoors / classroom) and in Forest School</li> <li>▪ Practitioners gain a <b>better understanding</b> of the children (e.g. their individual learning styles)</li> </ul>
<p><b>Storyboard Question 5.</b> <i>Longer-term outcomes</i></p>	<ul style="list-style-type: none"> <li>▪ Improvements to <b>physical stamina</b></li> <li>▪ Children appear <b>more relaxed</b> in the Forest School learning environment without perceived pressure</li> <li>▪ Children's <b>creativity</b> developed</li> <li>▪ Children transferring fine and gross motor skills to life outside Forest School</li> <li>▪ Improved use of language means children become <b>more confident to communicate</b> with peers, teachers and parents</li> <li>▪ Improved self-esteem (as a result of <b>feeling listened to</b> and valued)</li> <li>▪ Children have <b>adapted</b> well to their new outdoor environment</li> <li>▪ Children are <b>more assertive</b> in a <b>non-aggressive</b> way</li> </ul>

The Storyboard was undertaken as a form of brainstorming exercise. For the participants involved, the rows (reminiscent of an impact map described in Sanfilippo et al. 2005)<sup>13</sup> describe how the group summarised the changes that they as practitioners would look out for in order to show that their project was working. At the same time the recorded comments provided a useful affirmation of the potential benefits of Forest School for choosing the propositions to focus on, and therefore the prompts for their recording templates.

<sup>13</sup> See [www.proveandimprove.org](http://www.proveandimprove.org) for more details

In addition it was the process of discussion that proved vital for challenging assumptions and building a shared understanding of how what was planned would indeed bring about the changes hoped for.

Appendix 5 shows another example of expected changes, as they were described in a Storyboard exercise undertaken by practitioners involved with Burnworthy Forest School in Somerset in October 2004. It also shows how the practitioners taking part in the exercise translated these phrases into characterisations of the evidence that they would be looking for – literally the ways that they would know that these desired changes had indeed come about.

Appendix 6 compares the findings from the Worcestershire and Oxfordshire pilots alongside those from Somerset.

Definitions of timescales for 'initial', 'medium' and 'long' were different, but it is worth noting that although the background and make-up of the groups of children for each of the pilot groups was different there were many similarities in the expected changes that they claim would come about as a result of taking part in Forest School.

Only Oxfordshire chose to identify the specific longer-term changes in terms of *improved academic performance*. Although the implication from all pilots was that this was an expected outcome of their endeavours, it was not considered by any of them to be the ultimate and primary goal of Forest School.

## Propositions (What practitioners were looking for)

### *Developing Propositions for Recording Changes*

The Storyboard exercise was an important part of the self-appraisal process; all the pilots went through it as a way of describing the claims (or hypotheses) (Appendix 7) that they were making about what their Forest School could achieve.

With the Storyboard questions fully explored, they moved on to the next stage of deciding what changes were most important to measure or 'capture' that would demonstrate that their project was succeeding. They decided on the most important headings and described them in terms of **propositions** with the status of *stated objectives* or *desirable outcomes*. For example, the propositions outlined on page 16 above were developed during Phase 1 of this evaluation (Murray, 2003).

The results from the Storyboard exercises for the Oxfordshire Pilot group meant that they chose to describe their propositions as follows:

Forest School...

- Increases self-esteem and self-confidence
- Improves social skills
- Contributes to the development of language and communication skills
- Improves physical motor skills
- Motivation and concentration
- Contributes to children's knowledge and understanding of the environment.

Shropshire decided to use the same propositions as Oxfordshire when they joined the pilot. Although similar to Oxfordshire when it came to developing the self-appraisal templates for collecting weekly data on progress, Worcestershire went into a little more detail concerning the development of language and communication by highlighting the distinction between *speaking, listening and mark-making* (Appendix 3). They also chose to qualify what they called *levels of skills and knowledge* by identifying *numeracy and information / communication technology*. They replaced social skills with *ability to work co-operatively* and in common with Phase 1 retained *motivation and attitude to learning*.

Broadly the hypotheses and therefore propositions for all four pilot groups were the same. From the point of view of process however, it is important to note that although subsequent manifestations of a self-appraisal methodology could very easily provide these 'ready-made' propositions at the start, it is the very act of discussion and deliberation undertaken by practitioners and stakeholders together that ensures that the subsequent evaluation is 'owned' and its specific relevance to their project understood.

For all the pilot groups that undertook Stage 2 of the evaluation methodology the above propositions formed the prompts for the observations undertaken by

practitioners in the field. For the rest of this report we aggregate and present the findings and emerging eight themes relating to the attitudes, perceptions and behaviours of the 24 children in the study based on those prompts. The first six themes are reproduced in Table 3 below, along with a short statement summarising what the practitioners meant by each.

**Table 3: Themes underlying the propositions of change**

1. Confidence	2. Social Skills	3. Language and Communication
Characterised by the self-confidence and self-belief that comes from children having the freedom and the time and space to learn, grow and demonstrate their independence.	Characterised by an increased awareness of the consequences of actions on other people (peers and adults), the acquired ability to undertake activities with others either by sharing tools and tasks, or by taking part in co-operative play.	Characterised by the development of more sophisticated uses of both written and spoken language (vocabulary and syntax) that is prompted by the visual and other sensory experiences of a child taking part in Forest School. At the same time these experiences can stimulate and inspire conversation amongst children who are otherwise reluctant to engage in meaningful dialogue with peers and adults.
4. Motivation and Concentration	5. Physical skills	6. Knowledge and understanding
Characterised by keenness to participate in exploratory, learning and play activities, as well as an ability to focus on specific tasks and to concentrate for extended periods of time. In conversation at school or at home they display a positive attitude towards Forest School in particular, and towards learning in general.	Characterised by the development of physical stamina and gross motor skills - the physical skills and co-ordination allowing the free and easy movement around the Forest School site, as well as the development of fine motor skills – the effective use of tools and the ability to make structures and objects (e.g. shelters, dens or creative art projects).	Characterised by a respect for the environment and an interest in their natural surroundings; making observations and insights into natural phenomena such as seasonal change and the ability to identify different species of flora and fauna. This can be reflected in improved academic attainment.

In addition, as a result of the pilot groups undertaking reflection exercises using the **Poster Workshop** at the end of their evaluations (a way of checking back on the project and identifying any unexpected consequences of Forest School<sup>14</sup>), the study highlighted other important changes taking place beyond the effects on attitudes and actions of the sample group of children.

<sup>14</sup> For the purposes of this study these findings were aggregated with comments noted informally by participants at pilot group support meetings by the researchers at nef and Forest Research.



These wider effects are still important for understanding the bigger picture of the potential benefits of using a Forest School setting for teaching, and in this study were found to be mainly concerned with the impact the experience of taking part had on teachers, parents and practitioners not previously familiar with Forest School. They relate to observations of changes to *their* perceptions, attitudes and practice.

They have been combined with material from the pilot groups' Storyboard exercises (Table 4) that did not relate directly to the participating children and was therefore not deemed relevant for the propositions and prompting observation sheets used by the recording practitioners at the end of every session. The Somerset, Worcestershire and Oxfordshire pilot groups identified these wider effects in the following terms:

**Table 4: Themes of the wider impacts of Forest School**

7. New Perspectives	8. Ripple Effects beyond Forest School
<p>Forest School can give teachers and practitioners a new perspective and understanding of the child as they observe them in a different setting. A different relationship can develop between children and teachers as children see the teachers in a different setting, and coping with some of the same challenges as them.</p> <p>The Forest School setting also provides the evaluative space to identify the individual learning styles of the children.</p>	<p>As a result of taking an active part in Forest School teachers gain the opportunity to inform their own practice, and to adapt their approaches to outdoors learning.</p> <p>Due to children's enthusiasm for Forest School, they bring the experience 'home'. This can result in changes to out-of-school routines and behaviour with parents taking their children 'outdoors' more.</p> <p>Parental interest in and attitude towards Forest School can change over time; it gives them the chance to obtain a different attitude towards the outdoors such as their perception of risks.</p>

## **The Evidence of Change (What the recording practitioners found)**

It is clear that some of the children displayed changes in behaviour that surprised the recording practitioners, either because of what they knew of the children themselves, or what they had been told about them by the teachers and parents.

Interventions of this nature do not occur in a vacuum; there will always be other influences on the ways children's behaviour can change over time. However, according to the views of the practitioners, teachers and parents who contributed evidence, the changes they describe amongst the children in this study were attributed wholly or partly to their involvement with Forest School.

In line with the story-telling approach to collection and presentation of data, each of the eight themes under which our evidence is presented is sub-divided into four sub headings, as follows:

- Forest School is a place where...(features)
- As a result...(benefits)
- This is often manifested by...(example behaviours)
- And this is what we found...

The evidence material used is drawn mainly from the recording templates completed by the practitioners after each session for each of the 24 individuals in the study. It is supplemented by quotations from informal questionnaires carried out with some of the teachers, parents and pupils. In addition, some of the comments have been drawn from the Poster Reflection Workshops undertaken by the Shropshire and Worcestershire pilots.

# 1. Confidence

This is characterised by the self-confidence and self-belief that comes from children having the **freedom** and the **time and space to learn, grow and demonstrate their independence**.

So in summary:

## ***Forest School is a place where...(features)***

- Children take part in regular and frequent sessions undertaken throughout the school year
- Children are taught strict routines for safe behaviour in the outdoors
- Children are allowed to explore and discover new experiences for themselves, and so often the learning opportunities are child-led

## ***As a result...(benefits)***

- Children have the time and space to become more at home in a new and unfamiliar environment
- The routines become embedded and provide a framework for safe exploration
- The freedom allows children to develop a responsible independence, and the confidence to take risks and initiate their own play and learning

## ***This is often manifested by...(example behaviours)***

- Children demonstrating a greater self-belief in their capabilities
- Children relating well to their peers and to adults in the Forest school setting
- Children appear more relaxed, keen to learn and assertive in a non-aggressive way

## ***And this is what we found...***

### *Frequent and regular sessions*

One of the key elements that sets Forest School apart from many other approaches to outdoor learning is that the children attend on a regular basis (e.g. one afternoon/morning per week or fortnight) and over an extended period of time (e.g. twelve months or more during school term). In this way they gain benefits that could not be achieved in only a few isolated sessions as it allows children to develop a sense of ownership of the wood and feel comfortable and more relaxed in it. The extended contact also allows children to become more observant about the physical environment and experience the changing seasons.

It is clear from this evaluation that a number of children take quite a long time to become familiar and confident with Forest School and the routines that go with it such as getting into the right clothing, travelling to the site, walking to the Forest School area and learning about safety.

**Evidence of change**

Typically it took Wayne nine sessions (most of the first term) before it was noted by the recording practitioners that he was keen to go to Forest School. (*New Hinksey, Oxfordshire*)

Chloe appeared un-confident in a woodland setting, possibly because this was not an environment she was familiar with. After seven sessions she was generally more cheerful about going to Forest School. (*New Hinksey, Oxfordshire*)

These long time periods show for the children who may not have regular contact with the natural environment that they need time to become familiar and comfortable with it. In this way the children are allowed to develop a relationship with and understanding of the woodland setting at their own pace. Over time as the children's confidence grows they become more independent in the free atmosphere of Forest School.

**Evidence of change**

The recording practitioner noted that Greg did not seem familiar with woodland when he first started at Forest School. However by his fourth session it was noted that:

*Greg is learning a huge amount about his environment through touching and playing. (Longnor, Shropshire)*

In his first session Anthony was not confident, not seemingly enjoying the forest and was expressing worries and holding on to an adult's hand. By his fourth and fifth session he began to explore the setting more freely.

*His confidence with his surroundings has increased dramatically. (Anthony, Longnor, Shropshire)*

The Forest School practitioner noted that as his confidence increased Anthony began to find the wider forest itself more interesting than whatever task he was currently engaged in; this was interpreted as a positive step. The practitioner felt that Anthony was learning to initiate his own ideas for play, thereby demonstrating that he had found the confidence to try out new activities for himself.

In Lisa's case she already had experience of the outdoors, as she lived in the countryside. However Lisa was seen to be very quiet at the beginning of Forest School, whereas by her fourth session she was becoming more confident, independent and starting to face new challenges well. She eventually began to take on a leadership role showing the other children in her group what to do, and in turn they started to see her as one of the leaders of the group.

So for Lisa, sharing her existing experience with her peers in a slightly different context provided an important opportunity for her own growth in self-confidence.

Lisa's parent partly attributed changes to her daughter's confidence to her taking part in Forest School:

*Even though we live in the countryside it is lovely for children to explore together in a wood and I feel the total experience has helped improve my daughter's confidence. (Parent's comment, Longnor, Shropshire)*

#### *Forest School routines embedded*

Routines that are learnt and carried out on a regular basis provide stability, consistency and security. In the same way that in the classroom children benefit from learning and understanding routines which provide a framework that orders their activities, so too in Forest School these are gradually established over time. Knowing what to expect from teachers and Forest School Leaders provides clear boundaries (both physically in the woodland area and for how to behave in relation to other people) so the children are left to think and undertake activities more freely. This allows them to build confidence through the experiences they discover for themselves.

#### **Evidence of change**

Merlin was not happy taking risks and did not have the confidence to leave adults or explore the wood without adult support at the beginning of his Forest School experience. Initially recording practitioners noted that he was 'not inspired' by the woods.

By his thirteenth session Merlin's confidence had increased as the weeks progressed and he was able to work independently away from adults for long periods of time. As he gained confidence he became increasingly interested in his surroundings and was more observant about what was around him.

*[Merlin] Has become more confident as Forest School sessions have gone by and now uses forest with more independence. (Practitioner recorded comment, Finmere, Oxfordshire)*

#### *Freedom to take risks*

Increasing confidence can also lead to a child's greater independence and a desire to explore further than they have done in the past. Where this creates the potential for danger or harm either from the surroundings or by taking part in specific activities using tools and materials, the risk is managed rather than avoided altogether.

### **Evidence of change**

Lisa seemed wary of the environment at first and the practitioner suspected that she had had limited previous experience of woodland play. But by her fifth session she was beginning to show that she was more at ease with her surroundings. (*Longnor, Shropshire*)

Erin gained confidence quickly at Forest School, it was noted that her self-esteem improved and that she was enjoying taking some risks with tool use.

*She enjoys the tasks and opportunities to use tools. She recognises the fun in using things that have a risk but is fully aware of it and how to behave correctly. (Practitioner comment, Condoover, Shropshire)*

*Erin is so confident in the outdoors now it's incredible. (Parent's comment, Condoover, Shropshire)*

### *Child-led learning*

As the children gain confidence and become familiar with the woodland setting they start to take on challenges. The woodland setting (bounded by rules and routines) gives them the freedom to approach tasks in a different way from the classroom. The children enjoy their experience as an adventure. And so another key feature of Forest School is that by allowing this safe framework for children to make their own discoveries, the setting is flexible enough to be adapted to what interests children and allows for child-initiated learning to take place. According to Harris Helm et al. (2005) 'Young children construct their knowledge best through active, engaged, meaningful experiences that provide interaction with their environments and others'.



### **Evidence of change**

Esta's parent noted this feature as having a positive effect on her daughter's ability to learn:

*She does a lot of nature stuff at home but sometimes absorbs more by doing it at school or repeating something in a different environment. (Parent's comment, Finmere, Oxfordshire)*

And likewise the weekly entries in the practitioners' observation sheets show Justin becoming increasingly inspired by the woods and more able to work independently. Kelly G was observed to be more comfortable in the free atmosphere of Forest School than in the school environment. (*Group 3, Worcestershire*)

## 2. Social Skills

This is characterised by an **increased awareness** of the **consequences of actions** on other people (peers and adults), the acquired ability to **undertake activities with others** either by **sharing tools and tasks**, or by taking part in **co-operative play**.

So in summary:

### ***Forest School is a place where...(features)***

- Children are encouraged to work with each other in the pursuit of tasks that need more than one pair of hands (e.g. Sawing a log, building a shelter, collecting material for a nest)
- Materials and tools are shared
- Children are given the freedom to play independently of adult intervention, or guided by the rules of games that encourage co-operation (e.g. 1-2-3 Where are you? – a hiding and finding game)

### ***As a result...(benefits)***

- Children become accustomed to working independently from adults
- They gain an increased awareness of others' personal space and are able to form new bonds and friendships as they identify abilities that are valued by their peers
- They learn what can be achieved with more than one pair of hands

### ***This is often manifested by...(example behaviours)***

- Children negotiating with each other to achieve group tasks
- Children demonstrating 'pro-social' or pro-actively helpful behaviour
- Children relating positively to members of their peer group
- Children joining in with group activities, or encouraging others to do so

### ***And this is what we found...***

*Fantastic! Children are happy, calm, helpful to each other. They have bonded as a group better than any group of children I have worked with in 23 years.*

(member of staff from Lognor School, Shropshire)

Whilst Forest School, like any teaching setting, aims to encourage children to develop their potential for positive characteristics and constructive behaviour, it is not necessarily the goal to turn every naturally solitary youngster into a charismatic leader. It is more about allowing children to identify their own strengths, and recognise the value that they can bring to relationships with their peers as well as the value that they themselves can gain from working with others. As one particularly insightful 4-year-old girl noted during a Forest School session in Shropshire: *'The children could help themselves if they helped each other'*.

Indeed Forest School can be deemed to have been successful when children who initially kept themselves apart from the group (and who were not appearing to benefit from the Forest School experience) become much more inclined to take part in group activities and to help others. This can happen to the extent that a child regularly demonstrates what one practitioner described as ‘pro-social behaviour’.



Working together

Helen Howes

Pro-social behaviour can be characterised by giving, helping, sharing and comforting others, and is a key indicator of the presence of social skills. This is now acknowledged as an important part of a child’s development as they learn to accept, get along with, and work with their peers.

#### **Evidence of change**

Towards the end of his Forest School sessions Jeremy was regularly playing with other children. This demonstrated a change from his initial reluctance to take part in Forest School at all. It was after his first term that he started to enjoy himself more and when he joined in singing the Forest School song with the other children, the recording practitioner expressed real surprise in her notes, saying: ‘*Joining in with singing is not something Jeremy does! Very unusual*’. At his tenth session he was happy to lead the group when they were walking and he even put himself forward to climb a tree first. (*Pegasus, Oxfordshire*)

Greg started off at Forest School by not working or walking with others, but by his sixth session he was working as part of a group – ‘*he was absolutely on task*’. (*Longnor, Shropshire*)

Fiona did not interact much with other children at the beginning and tended to speak only to adults. By the end of her second term at Forest School she had become good friends with Erin, with whom she worked and played regularly. (*Condover, Shropshire*)



### **Evidence of change**

Leanne was not (in an assessment of her regular behaviour) a naturally collaborative worker but her Forest School activities provided her with opportunities to help others by handing out waterproof trousers or cups at snack time, she also helped another child who was struggling with a rucksack. In time she was starting to learn to wait her turn when it came to tree climbing. (*Pegasus, Oxfordshire*)

In early sessions Greg was known to be the one rushing to help himself to the tools and resources before anyone else could get to them. However, practitioners noticed a change in his behaviour when he agreed to share the trowel as well as taking turns for its use. (*Lognor, Shropshire*)

Evidence from the three case studies showed that the time spent in Forest School allowed children who initially were not confident to work or play with others to identify apparently new skills that their teachers or practitioners were not aware that they had. When these children were given the freedom to express themselves, it helped build their confidence and standing amongst their peers, which in turn led to their working more co-operatively.



'Our Green man'

*Helen Howes*

### **Evidence of change**

Lisa was quiet and unwilling to work co-operatively at first. As her confidence increased so she developed a talkative nature that contrasted with her quieter behaviour outside Forest School. Being talkative gave her a 'way in' to her ability to work with others and eventually led to her taking on a leadership role amongst her peers. (*Longnor, Shropshire*)

Anthony's baseline scores against four of the five propositions used as observation prompts by the Shropshire practitioners were low. He was wary of interacting with others and appeared quite low in self-confidence. The exception was in his use of language and his ability to communicate. By the end of the first term he had improved on all five propositions. His ability to communicate had made him stand out in the group as someone who talked and explained things, which naturally meant that he found himself working with others. He had identified the potential for this role early on as initially Anthony's communication with his partner was confined to telling him what not to do, but as the weeks progressed he started co-operating with his partner so that they began working well together. (*Longnor, Shropshire*)

A child's social skills represent one of the more difficult of the propositions to assess. It requires a high degree of insight and intimate knowledge on the part of the recording practitioner in order to distinguish subtle differences in behaviour from the norm. Often it is the small yet significant changes that point towards the Forest School setting having a positive effect.

#### **Evidence of change**

Serena was physically confident but unwilling at first to engage with others. When she tried to move a log by herself she realised that she needed help and asked for this from another child. *(Pegasus, Oxfordshire)*

Wayne was a solitary child, not naturally outgoing or particularly self-confident, he needed a lot of adult support and liked to have familiar adults around him. The practitioner noted that he wanted to be friends with other children but that he found it hard to connect with them. He did find a new friend in session eleven but still tended to follow others and echo them rather than work constructively with them. However one activity in a later Forest School session saw Wayne leading others with a map. *(New Hinksey, Oxfordshire)*

Justin tended not to engage with his peers partly because he seemed to prefer working alone and was independent enough to do so. He did try to interact more with others when the group carried out a special walk in aid of the Asian Tsunami. The Forest School Leaders encouraged him to work with others in session nine and he did this very well; they felt that he was more focused on the task at Forest School than he ever was indoors. *(Conover, Shropshire)*

*Merlin didn't react to the others and was reluctant to join in; he turned to adults for help rather than his peers. At the beginning of July 2005 the fire had been built and three children were left to help with the fire. Merlin helped the children select the right sticks for the fire, and gave them directions about how to approach the fire carefully and encouraged the others. (Practitioner's comments, Finmere, Oxfordshire)*

Even for children who were already able to work and interact well with others their time in Forest School often highlighted improvements in the development of their whole character across a range of strengths and skills.

#### **Evidence of change**

Esta was said to be a sociable child and interacted well with others. However over her Forest School sessions she became better able to assert her place amongst her peers and to hold her own with older children than she had done in other environments, particularly in the classroom. *(Finmere, Oxfordshire)*

Lisa was quiet and appeared very unconfident at the beginning of her Forest School experience, however she started to work more with others after a number of sessions:

*Sam and Lisa were working beautifully, very little conversation used but they both understood the purpose of what they wanted and made a beautiful garden. (Lisa, Longnor, Shropshire)*

She also managed to use her skills to resolve an argument that she had with another child showing that she was able to negotiate and stand up for herself.



Forest Concert

Helen Howes

### 3. Language and Communication

This is characterised by the development of more sophisticated uses of both **written and spoken language** (vocabulary and syntax) that is prompted by the **visual and other sensory experiences** of a child taking part in Forest School. At the same time these experiences can **stimulate and inspire conversation** amongst children that are otherwise reluctant to engage in meaningful dialogue with peers and adults.

In summary:

#### ***Forest School is a place where...(features)***

- Practitioners plan activities and allow for opportunities that facilitate natural and spontaneous talk amongst the children
- Children are encouraged to use all their senses to facilitate the learning process and to excite their imaginations
- There are more variable and unpredictable situations than in a classroom environment (e.g. the weather, found objects and observed natural phenomena, changes to the woodland environment)

#### ***As a result...(benefits)***

- Children communicate their ideas to peers on practical issues and in the creation of imaginary play
- Children are inspired to talk freely about Forest School back in the classroom and at home
- Children use more descriptive language to describe (and try and make sense of) the unfamiliar environment they find around them. (e.g. using 'slurpy, squelchy' to describe a muddy puddle)

#### ***This is often manifested by...(example behaviours)***

- Children being better able to work co-operatively – as they are able to negotiate with others to achieve group tasks
- Children become more confident and feel more able to communicate with peers and adults
- A developed use of language by children (verbally, and in mark-making and written work)

#### ***And this is what we found...***

As children grow and develop they learn to use language to convey messages to others, to express their feelings and to develop their social contact with others. In order to communicate in an effective way children need to learn to negotiate with others, take turns in speaking, listening, and they also need to make relevant comments as well as intelligible ones (Lu, 2000).

*Increased and developed use of language*

Forest School can play an important role in language development and communication as it can help to facilitate natural spontaneous talk and the use of descriptive language.

**Evidence of change**

It is often the case that children are so excited and inspired by their experiences in the woodland that they can hardly wait to tell teachers, peers and parents about them. For example, Leanne is on the Special Educational Needs register; her mother states that Leanne likes to tell people about Forest School.

*Normally tells family members about it on the day and over the weekend and any other people such as neighbours she can find to talk about it. (Leanne's mother, Pegasus, Oxfordshire)*

Leanne has learnt the days of the week due to Forest School because she is so keen on going. She now does not need to ask what day of the week it is and how many days there are until the next Forest School as she can work it out for herself. She also started to use descriptive words such as 'squidgy' to describe mud.

Greg had a low baseline score for his use of language at the beginning of the first term of Forest School sessions. He had a tendency at first to rush off without thinking and try to do his own thing although he was often unable to complete the set task on his own and needed others to direct him. By his third Forest School session he was starting to initiate his own ideas. He also showed that he had thought about and understood about fire safety, as the following quote illustrates:

*Helen (practitioner): Would it be safe to leave the fire burning?*

*Greg: No you could burn yourself really hotly.*

*Helen: How could we put it out?*

*Greg: Get water and throw it on to it. (Longnor, Shropshire)*

By his twelfth session, although his descriptive vocabulary was still noted as 'limited' the practitioner said that his recognition of woodland plants was increasing. Also during one session he said he was going to make match sticks (the session was focused on preparing wood for a fire). This quote recorded by the practitioner shows that on this occasion he was looking to involve others in this activity. He asked the other children to listen as he broke a twig:

*This has got a really good snap hasn't it? (Greg, Longnor, Shropshire)*

He worked hard to gather sticks and snap them to the right size for building a fire. He listened carefully for the dry twig snapping sound that would tell him it was suitable for the fire. He was obviously proud of his work and said '*look how much I've got*'.

The children's ability to communicate improves as they are enthused by Forest School and want to tell their family and friends what they have been doing.

#### **Evidence of change**

When Serena first started at Forest School she was reluctant to communicate and was only verbalising disjointed ramblings. By Christmas (after 7 weeks at Forest School) she was becoming more coherent. She could be prone to attention-seeking and did this by vocalising - shouting, screaming and saying silly words. The Forest School Leader noted that she could be difficult to engage with in conversation and often said things she thought people would not want to hear. Serena became more communicative after a number of Forest School sessions and by session eighteen was talking more with peers, not only with adults as she had done previously. (*Pegasus, Oxfordshire*)

The Forest School practitioners said that Justin was not always aware of what was happening in his class and highlighted that he would often answer questions with comments that were not relevant to the questions that had been asked. It was noted that his speech was difficult to understand but he seemed happy to chat nonetheless. He would often detach himself from the group at Forest School and work alone although he seemed to enjoy the sessions.

By the end of Justin's Forest School sessions practitioners noted that his communication skills '*have definitely improved and his speech is clearer*' although his comments are still not always relevant to the discussions, however his actions often show that he has an understanding of the activity being undertaken. One key aim for the future identified by his teacher involves improving his language skills and breaking instructions and questions down into manageable steps. (*Finmere, Oxfordshire*)

#### *Improved vocabulary*

A key part of language development involves interacting with more competent language users. Where there is an emphasis in Forest School settings on co-operative working, this provides good opportunities for this. It also demonstrates another example of how a child can use existing skills and capabilities (like being friendly and outgoing, or clever with their hands) which make them able to contribute value in some other way to the work or play partnership with their peers.

#### **Evidence of change**

Esta is naturally a sociable child. Forest School enabled her to interact with older children whom she might not normally work with in her home or school life. Because of this her language improved throughout the year. According to her teacher Forest School has allowed Esta to develop a different vocabulary that she can transfer to the classroom environment. (*Finmere, Oxfordshire*)



Erin had a good grasp of language and was confident enough to speak to grown-ups as well as her peers:

*There's a woodlice. Debbie can you brush it into the pot? I've found woodlice in our logs at home. They're in the bottom of the garden (Erin, Condover, Shropshire)*

It was noted by the end of her Forest School sessions that she was starting to develop new vocabulary. She used the words such as 'slurpy' and 'squelchy' to describe the mud at Forest School and also used language that showed an understanding of teamwork when she said, during a mini-beast hunt, that '*children could help themselves if they helped others*'. She described a bonfire at a friend's house and how when the fire was lit the children looked '*wobbly*' through the flames and she also used the word '*boingy*' to describe something she found hard to push.

#### *Communication and self-confidence*

It is apparent that an example of a child's improved use of language is often associated with their improved levels of self-confidence. In many cases increased willingness to communicate provided a positive indicator of significant changes in this area.



Map Making

Helen Howes

#### **Evidence of change**

Anthony had good verbal skills but due to a wariness and lack of confidence at Forest School primarily talked about his worries and concerns. It wasn't until he became more confident with his surroundings that he started offering his own ideas. (*Longnor, Shropshire*)

Lisa was noted as a quiet child who hardly ever spoke in school. Over the weeks she attended Forest School her confidence quickly improved to the extent that the recording practitioner noted that '*there was more talk at Forest School than we ever hear in school*'. With her improved confidence Lisa was able to talk more with others, explain what she was doing and she began asking questions.

In the third week of Forest School she used her improved skills to resolve an argument with another child. She also started to take a leadership role. It was observed that as other children started to come to her for advice and help she was able to start directing them. She worked with Reuben who has Down's Syndrome and instructed him on collecting sticks. Together according to the practitioner they built an excellent house for Sally Squirrel. The following speech was recorded by the practitioner.

*Let's get some short ones Reuben, that's a big one Reuben. Let's build the house like this. (Lisa, Longnor, Shropshire)*

### *Inspired to learn*

Children can often find themselves experimenting with their use of language in the creation of imaginary play. As for some children Forest School is a different and sometimes unfamiliar environment, it provides opportunities for them to learn new words, create imaginary play and to make up stories using materials and ideas from their surroundings. As the children work at their various activities they need to describe their ideas to others.

#### **Evidence of change**

All three sets of recording templates made reference to the fact that in the latter sessions children had started to use descriptive words such as 'squidgy', 'slurpy', 'boingy' as they familiarised themselves with the woodland environment. This development was corroborated by many of the comments from the children's parents:

*She also noticed his vocabulary had increased and he could name some plants such as cow parsley, buttercups and daises (interview with Jeremy's mother, Pegasus, Oxfordshire)*

*[Esta's] language has improved throughout the year. Forest School has helped her develop different vocabulary which she can then transfer to the classroom environment. (Parent's comments, Finmere, Oxfordshire)*

At the same time some parents noticed that their children were becoming more observant when outdoors.

*Chloe is certainly now more aware of the natural environment and enjoys pointing things out (Parent's comment, New Hinksey, Oxfordshire)*

In response to the question 'In what ways has Forest School made a difference to your child', Wayne's parent noted:

*[An] improved knowledge of bugs and flowers (Parent's comments, New Hinksey, Oxfordshire)*



### *A specialist Speech and Language group*

One of the groups in this pilot came from the Speech and Language Unit at Marlpool First School in Worcestershire. It takes children from 5 to 9 years old from all over the Wyre Forest Area of Worcestershire. (This is an electoral area covering the towns of Kidderminster, Stourport and Bewdley and the surrounding areas). The children all have statements of Special Educational Needs covering a range of disordered language difficulties aligned with emotional and behaviour difficulties. Some children are on the Autistic Spectrum.

The three children from this group (Worcestershire Group 3) in the study have receptive language difficulties, which means they have difficulty in understanding. For example the 5 year olds have an understanding level of a typical 2 year old. Practitioners break language down and speak mainly in verbs and nouns (e.g. 'Wood anemones white; white; what else white?' or 'Where birds, Jeremy?') It is hoped the children will re-integrate into mainstream schooling before they reach secondary age.

The observations made of these individuals over time in Forest School demonstrated that all three showed improvements across a range of behaviours and actions, of which their use of language was just one part.

#### **Evidence of change**

Jeremy F who was part of this group started to communicate more with others on the mini-bus by his fourth week, and by the end of his sessions at Forest School his self-esteem has risen slightly and his ability to work with others. This was reflected in his speech, as he became chattier.

After Christmas it was clear that Kelly G was beginning to enjoy conversing. The practitioner noted that she was much calmer at Forest School than in the classroom as she became more confident she co-operated with others and made more comments '*I love fresh air*' or '*I enjoyed that*' when she climbed a tree. (*Group 3, Worcestershire*)

## 4. Motivation and Concentration

This is characterised by **keenness to participate** in exploratory, learning and play activities, as well as an **ability to focus on specific tasks** and to **concentrate for extended periods of time**. In conversation at school or at home they display a **positive attitude** towards Forest School in particular, and learning in general.

In summary:

### ***Forest School is a place where... (features)***

- Subjects on the school curriculum are set in a context that is distinct and different from the classroom
- Learning is encouraged to be child-initiated allowing for imaginative, creative and exploratory activities
- There is a specific focus on how the whole child can benefit from the Forest School experience

### ***As a result...(benefits)***

- Children are eager to participate, and inspired to explore and learn from an unfamiliar environment
- Children initiate their own learning and play activities
- Children focus and concentrate for longer periods of time on tasks and issues that interest them

### ***This is often manifested by...(example behaviours)***

- Children want to learn
- Children want to come back to Forest School
- Children are keen and excited about setting off for Forest School
- Children talk freely about Forest School back in the classroom
- Children demonstrate an increased knowledge of the environment, beginning to recognise tree species and a few mini-beasts
- Parents take more interest in Forest School due to children's enthusiasm
- Children get ready for Forest School more quickly (as opposed to reluctantly)

### ***And this is what we found...***

Bredenkamp et al. (1992) suggest that '*Activities that are based on children's interests provide motivation for learning. This fosters a love of learning, curiosity, attention and self direction*'.

Children's interests motivate their desire to learn, as they strive to make sense of their surroundings. Outdoor environments tend to fascinate children, and so using and allowing them to explore the natural environment will tap into a child's innate curiosity. A number of practitioners have highlighted how some children have become increasingly inspired through their interaction with the woodland setting. This is because the children see new things and have different experiences that they may not have had in the past. As a result their curiosity is stimulated.

Child-initiated learning helps in this respect as the teachers can see what intrigues the children and they can then allow the children to work or solve problems related to this interest. Curiosity drives exploration which can lead the child to discover new things, ideas and concepts. An important aspect of Forest School is fun, if the children are enjoying themselves they are enthused and encouraged to learn. One of the staff members at Condoover Pre-School described how Forest School was a place where children could learn 'in a sense of wonderment and awe' by being close to nature.



### **Evidence of change**

Barry needed a lot of adult support at first but after a number of sessions he was independently showing a high level of interest, particularly in badger holes. (*Group 1, Worcestershire*)

Chloe's parent outlines the importance of finding out more about woodlands from direct experience.

*It's a marvellous opportunity for children to learn to be comfortable in and curious about an environment that might seem alien or threatening to children not familiar with woodland. Since most British children don't have woodland or natural habitats for wildlife in their daily experience, Forest School helps them expand their sense of what is possible and natural. It encourages the development of curiosity, patience and observational skills, since the patterns and forms in a forest are not immediately obvious, but take some seeking out. (Chloe's parent, New Hinksey, Oxfordshire)*

Curiosity and interest in the woodland setting leads the children to ask questions. Leanne was particularly fascinated by a stuffed hedgehog that was introduced into one of the Forest School sessions.

*Is it dead or real? Will it move? Is it a boy or girl? (Leanne, Pegasus, Oxfordshire)*

Jeremy was interested in looking at the roots of a fallen tree and he went on to suggest that the bark of a tree was like a cover. He noticed two Californian redwoods and was surprised by how tall they were. (*Pegasus, Oxfordshire*)

### *Learning about the environment and using imagination*

The children can also become excited when they discover new animals, plants or other natural phenomena they have not seen before, and this is manifested by their desire to tell and show others. The freedom of the Forest School setting inspires children to use their imaginations. There are several examples described by practitioners of the imaginary games invented by the children. For example they dig for gold or find hidden treasure and search for dragons. This illustrates the freer atmosphere that is a part of the Forest School approach.

#### **Evidence of change**

Leanne's curiosity and observation of what is around her has led her to develop a good understanding of the natural environment. (*Pegasus, Oxfordshire*)

Serena in one trip on the minibus talked about the colours of flowers they drove past and also spotted some animals. This was unusual behaviour for her, the recording practitioner noted that she was very engaged and was '*looking out for things*'.

(*Pegasus, Oxfordshire*)

Initially Justin was noted for not being very creative in his play but in time at Forest School he started to use his imagination much more; on one occasion he cooked a 'wolf pie' and Frank built a house for 'Mousie' and created a whole story around it.

(*Finmere, Oxfordshire*)



Building a house for Sally Squirrel

*Helen Howes*

## 5. Physical Skills

Characterised by the development of **physical stamina** and **gross motor skills**. The physical skills and co-ordination allow the free and easy movement around the Forest School site, as well as the development of **fine motor skills** in the effective use of tools and the ability to make structures (e.g. shelters, dens) and objects (e.g. creative art projects).

In summary:

### ***Forest School is a place where...(features)***

- There are challenges to physicality, dealing with rough terrain
- Children handle tools, objects and use equipment
- Children acquire physical skills

### ***As a result...(benefits)***

- There is improved and increase use of motor skills
- Naturally the children improve their balance, and through physical activity, develop their stamina
- In the pursuit of a Forest School task or goal (e.g. creative projects such as whittling a stick or making a tree cookie) they have the opportunity to make use of gross and fine motor skills

### ***This is often manifested by...(example behaviours)***

- Increased fine and gross motor control; children are more steady on their feet and don't fall over as often
- Visible improvements to children's physical development
- Improvements to physical stamina
- Children begin to show awareness of the space around them when they move
- Children are tactile and want to touch and feel the natural materials around them
- Children become more self-reliant / independent

### ***And this is what we found...***

Because of the variety of ways in which the children are helped, tested and challenged at Forest School their contact provides them with plenty of opportunities to improve both gross and fine motor skills.

For gross motor skill development the children use their entire body or several parts of their body at the same time. Improvements in this area might include a better range of movement, improved quality of movement or increasing muscle strength.



Fine motor skills involve smaller and more intricate movements such as tying knots, using a stick to draw or write something, or using visual skills to build a small shelter.

Where it is appropriate the children are taught how to handle tools such as mallets or how to whittle sticks with penknives. However, rather than bringing materials and equipment with them, the children are often encouraged to make use of natural found materials to make dens and creations in the wood. Planned activity can concentrate on specific tasks such as toasting marshmallows over the fire or building small shelters. In addition the children climb designated climbing trees, slide on muddy slopes, dig in the ground and balance on logs. In every outdoor session children increase their awareness of the open space around them, which is often greater than their regular school playground. All the time they are learning to run and walk over the uneven terrain of the woodland floor.

### *Gaining stamina*

The children often have to walk to and from the site even when they have travelled by minibus to the area, and they can improve physically over the weeks with this exercise and through their activities in the Forest School sessions. Improving physical stamina is important for all children and an important part of a child's overall health and well-being.

### **Evidence of change**

It was clear that four of the Worcestershire children were getting tired on their return journey from Forest School, particularly at the beginning of the school year. By the end of their seventeen sessions two of the children were noticeably gaining stamina and were not as tired.

*Not tired at all – quicker on walk back (Angel, Group 2, Worcestershire)*

*JF's ability to maintain stamina has improved (JF, Group 3, Worcestershire)*

At Oxfordshire at session twenty-three (of the Pegasus school sessions) the day was spent at Wittenham Clumps (not their usual Forest School site) and the children walked for 3 miles during the day. Some of the children such as Leanne did well with this.

*Coped with the three mile walk without a problem (Leanne, Pegasus, Oxfordshire)*

Leanne's physical skills were noted as good when she first started Forest School and they have improved over her twenty-four sessions there. From the beginning she was keen to climb trees and confident when walking and running over uneven ground. She needed adult help to balance on a log at first but by session eleven she was doing this on her own and in a later session she worked at balancing on a log and enjoyed falling off and trying again, showing some perseverance and testing her skills. Her physical strength improved and she showed this in how she used a saw in session twenty-four.



Esta's mother thought that outdoor experience was important for her child as she identified her as not a very sporty individual. She felt that Esta could benefit from improving her balance and being provided with opportunities to clamber over logs and walk across planks was important in this regard. It also appears that Esta can benefit from the point of view of her health.

*Because she is a 'wheezy' child anything outside helps. (Esta's mother, Finmere, Oxfordshire)*

#### *Confidence to undertake risks and challenges*

Gross motor skill development also requires some confidence and children need to be able to learn to take risks. This too can be accommodated at Forest School. They also learn how to do things safely such as how to move around the fireplace. This is very important and a number of FSL's have commented that when they organised a celebration day inviting parents and siblings it was noticeable that the children who attended Forest School observed the fire safety rules while everyone else did not (*personal communication H. Howes*).

The children also explore the space of Forest School and test its boundaries. In one session in Worcestershire (Group 2 in session fourteen) the children explored to the furthest edges of the wood and by doing so they found a new climbing tree.

Sometimes the children visit new areas surrounding the original Forest School site. On one occasion a group had to cope with walking through tall bracken. At first this worried some of the smaller children and they were reluctant to take part because they could not see very far ahead. These types of activities are repeated so that the children become more confident and used to dealing with new situations.



Climbing a tree

*Helen Howes*

### **Evidence of change**

At first DL was apprehensive climbing a tree and was not confident with physical experiences but by his fourth session of Forest School he was getting more involved with physical actions such as rolling and a week later was not tripping over as much. By session sixteen DL had improved enough to enjoy and be happy climbing the Forest School climbing tree. (*Group 3, Worcestershire*)

For Worcestershire Group 1, in session twelve, the children were engaged in building a shelter and the quote from the practitioner below illustrates how Barry in particular gained confidence in physical work, and was becoming more prepared to take some risks.

*Excellent! Barry started quietly, joining in and went looking for sticks and spotted planks! He looked to the adult for permission and then enthusiastically began carrying them to the other adult. He then took further risks, positioning them so he could balance. He happily included others and showed a lovely sense of humour. A confidence not seen before. (Group 1, Worcestershire)*

Lisa, as her confidence increased was seen to be dashing through the wood and was dealing with uneven terrain very well and taking large confident strides and balancing well on a log.

*Lisa shows such enthusiasm – a joy to see (Longnor, Shropshire)*

Others started more cautiously such as Merlin who was not physically confident at Forest School at first and was unable to face physical challenges. He needed support to get changed into appropriate clothes to go to Forest School and was worried about his surroundings. His lack of activity led him to get cold easily in the winter sessions. His fine motor skills were very good but gross motor skills were poor. By session five he was becoming slightly happier with physical situations and by session fourteen the following quote outlines his improvement.

*Improving week by week and significant this week. He set himself a real challenge to balance on a log over a bridge. Needed help at first but managed on his own later. (Merlin, Finmere, Oxfordshire)*

It has also been observed by the teacher that Merlin has become more confident in his Physical Education classes at school. He now shows greater perseverance and does not get upset as quickly when he feels something is too challenging. Through his Forest School experiences and improvements he is starting to view physical challenges as fun rather than frightening. By helping to change his outlook on physical work Forest School has increased Merlin's confidence both outdoors and indoors.



**Evidence of change**

A disadvantage can be over confidence in physical activity and this was the case with Jeremy F who was not aware of the danger of climbing trees. Forest School can help children to better understand risks and how to deal and cope with them. However, Jeremy F's awareness of safety did start to improve and by session fifteen, he was concerned with the safety of others, he was starting to think ahead and assess risks more accurately. *(Group 3, Worcestershire)*

*Space and opportunity to learn and experiment*

There is spaciousness at Forest School that is not available in the classroom and school environment that allows children to move around in a different way. The tactile nature of the natural environment is also very important and it is clear that the children enjoy touching and feeling what is around them, for example by opening their mouths to taste the rain on their tongues.

In January or February 2005 all of the children in this study had the opportunity to spend a session at Forest School in the snow. They built snowmen, threw snowballs and stamped on icy puddles to break the ice. The snow altered the environment they knew and added something different that was special. Of course these activities could just as well take place in the playground or on the way to school. The subtle difference is that in Forest School the children are experiencing these activities in a more formal setting, so the practitioners are automatically making a studied analysis of how the children react and relate to the situation, whilst identifying the learning and growth opportunities that the children can gain from the experience.

It was clear in this study that adapting to the weather conditions can be a physical challenge with opportunities for learning and growth as the children try to stay warm in cold conditions or enjoy the rain by sliding in the mud. It was repeatedly noted that the children with less confidence in their physical ability and lower self-esteem became colder more quickly than the others who would rush around and keep busy.

As the children spend more time at Forest School and develop physically they trip over less and learn to put on their clothing such as waterproof leggings, coats and wellingtons more easily.

**Evidence of change**

Justin was less clumsy at Forest School than in the classroom allowing his teacher and the Forest School Leader to see that he could move effectively in a different environment. Because of his physical skills developed at Forest School he was able to use them to show another child around the site.

*[Justin] shows no sign outside of clumsiness or lack of spatial awareness he sometimes shows inside (Practitioner comment, Finmere, Oxfordshire).*

## 6. Knowledge and Understanding

Characterised by a **respect for the environment** and an **interest in their natural surroundings**. The children are able to make observations and **gain insights** into natural phenomena such as **seasonal change** and the ability to identify different species of flora and fauna. This can lead to **improved academic attainment**.

In summary:

### ***Forest School is a place where...(features)***

- Children are taken to and allowed to become more familiar with a natural setting different and distinct from the classroom
- Children are encouraged to follow rules and routines to deal with risk and recognise safety
- Learning is predominantly child-initiated and elements of the curriculum are presented in a practical context
- Children are encouraged to use all their senses to observe flora, fauna and natural phenomena

### ***As a result...(benefits)***

- Children are eager to discover things for themselves and they acquire an innate motivation to learn
- Children gain an awareness of seasonal change and an understanding of natural processes
- Children are keen for their parents to take them out into the 'outdoors' more often

### ***This is often manifested by...(example behaviours)***

- Children begin to recognise tree species and a few mini-beasts on repeated visits to Forest School
- Children demonstrate curiosity to find out more about the world around them
- Children notice more around them and show a respect for their surroundings, and a pride in their knowledge and familiarity of the Forest School site

### ***And this is what we found...***

For some children their time in Forest School represents a whole new and unfamiliar environment. For example, a mother of one of the children in the study has not attended a Forest School session and described it as 'not her thing'. The family has no garden and sometimes visits a nearby playground but does not go further afield or into the countryside. The child's mother only knows her daughter has been to Forest School because she comes back with muddy clothes. For children such as this with no garden and whose family does not visit the countryside or green spaces Forest School is an opportunity for them to experience contact with the natural world.

### ***Curiosity***

All the pilot groups were able to identify examples of children who visibly developed an increased curiosity that they believed was attributable to the child's experience in Forest School. Like many of the themes identified they are all linked, so that for example manifestations of a child gaining confidence are observed hand-in-hand with an increased desire to learn and explore.



### **Evidence of Change**

Barry was known at first for needing support from an adult whenever he was in Forest School. As the term progressed this became less, so that in time he was worrying less about holding hands and *independently displaying a high level of interest, particularly in badger holes.* (Comment from Practitioner, Worcestershire Pilot)

To start with, Merlin was so concerned about being in the woodland that he didn't take part or interact with any of his peers. Gradually he began to notice and identify mini-beasts, wanting to know their names and searching for more examples thereby demonstrating a curiosity inspired by Forest School.

Merlin's parent was asked what he had told her about Forest School. She replied that there had been '*A big debate about how they found the animals*' and that he had been '*interested in seeing and touching them.*'

### ***Knowledge***

Through constant and repeated contact with the site children acquire knowledge of the natural phenomena around them. Although this acquisition of knowledge is prompted by the expertise of the practitioner who is there to explain, much of the learning comes through child-initiated exploration.

### **Evidence of change**

The following comments represent examples of where children were picking up knowledge from their experiences in Forest School:

*She also noticed his vocabulary had increased and he could name some plants such as cow parsley, buttercups and daises (Interview with Jeremy's mother, Pegasus School, Oxfordshire)*

*He became increasingly interested in his surroundings and was more observant about what was around him*

*[Wayne shows] Improved knowledge of bugs and flowers (Wayne's parent, New Hinksey, Oxfordshire)*

*Chloe is certainly now more aware of the natural environment and enjoys pointing things out (Parent's comments, New Hinksey, Oxfordshire)*

*Leanne identifies plants and in general she seems able to name more things out of doors. (Practitioner's comment, Oxfordshire Pilot)*

When asked about changes they noticed to their child's behaviour that they attributed to Forest School, Greg's parent noticed that their son 'is much more concerned about wildlife and animals, and is very protective of them, particularly small animals.'

And in answer to the same question Fiona's parent noted that '[She] shows lots of interest in plants, trees and animals and their habitat.'

### *Understanding*

Remembering routines and safety are important features of Forest School, particularly when concerned with safety around the fire. For the children this can extend to a wider appreciation and awareness of risk as well as a better understanding of the impact of their actions.

Becoming familiar with the Forest School setting is as much about observing nature and the ever-changing weather as demonstrating a far more positive and responsible attitude in the way that they interact with it.

### **Evidence of Change**

The mother of Leanne, who is a Special Educational Needs registered child at Pegasus School, Oxfordshire describes how she sees a change in her daughter. She now:

*Talks about the whole process of things [ ... ] such as making a fire. Now has an awareness of appropriate clothing for the weather and outdoor activities.*

One practitioner cites the example of Fiona initially ignoring the rules about moving around the fire, and stepping into the fire circle (and therefore too close to the flames), whereas she has learnt now always to approach the fire safely by stepping over the fire logs from behind and sitting down, and reminds others to do so too.

And for Erin in the Shropshire Pilot:

*She is knowledgeable about each week's activity, (e.g. Splitting wood with a bill hook) and how it is done safely or sitting round the fire/toasting marshmallows - how to approach the fire, how long to blow on the marshmallow to make sure it's not hot. She enjoys the tasks and opportunity to use tools. (Practitioner's comment, Condoover, Shropshire)*

### *Ownership*

Becoming familiar and confident within the Forest School setting emerges as a strong indicator of the positive changes taking place in the attitudes and behaviour of the children.

Like all these characteristics these develop with time as children begin to remember where things are and are eager to show others. This is sometimes seen as a child demonstrating a degree of pride and ownership of the site, often by taking their parents there out of school hours.

### **Evidence of Change**

Although Esta Acle was confident at the start of her Forest School experiences she didn't know the site, but after a few weeks of her attending Forest School when two visitors came to the site she took them around and showed them where different things were.

Jeremy's mother said that Forest School has definitely helped her son's confidence. *'To start with he said he didn't want to go but now he checks every day to see if it's Thursday and he can go to Forest School'*. She acknowledged though that other factors – school and friends – influenced confidence levels.

She said Jeremy likes the routine of Forest School. [...] If they are driving anywhere near the site he always tells them the way to Forest School. He is very keen to take the whole family to Wittenham Clumps.

## 7. New Perspectives

Forest School can give teachers and practitioners a **new perspective and understanding of the child** as they observe them in the woodland setting. A **different relationship** can develop **between children and teachers** as children see the teachers in a different setting, and coping with some of the same challenges as them. The Forest School setting also provides a **formative evaluative space** to identify the individual learning styles of the children.

In summary:

### ***Forest School is a place where...(features)***

- Pupils and adults (practitioners, teachers and support staff) interact in a different environment from the classroom

### ***As a result...(benefits)***

- Pupils and practitioners gain a better understanding of each other
- There is an increase in trust between pupils and practitioners, forming trusting relationships/friendships
- Children develop a bonding relationship with peers and staff
- There is a comparable difference between children's behaviour in normal setting (indoors/classroom) and in Forest School
- Practitioners gain a better understanding of the children (e.g. their individual learning styles)

### ***This is often manifested by...(example behaviours)***

- Children act differently or show behaviour that has not been seen before

### ***And this is what we found...***

Forest School provides an opportunity for the teachers and Forest School Leaders to gain a different perspective on the children they are teaching. Because the



Pride

Helen Howes

experience is very different at Forest School than in the classroom both the children and practitioners are confronted with seeing each other in a different environment and sometimes facing the same challenges as each other, for example, coping with bad weather such as snow and heavy rain. Practitioners are able to see the children enjoy themselves, see them develop new skills and they are sometimes surprised that some of them develop or reveal a side of themselves that the practitioners have not seen in the classroom. This can help facilitate a more positive relationship between child and practitioner.

Forest School provides an opportunity for understanding the children more holistically. By seeing them behave and interact in a very different environment the teacher can get an additional insight into the child's behaviour and abilities. The Forest School approach also provides teachers with a better understanding of the potential of using the outdoors for children's learning. Teachers and Forest School Leaders have the time to build trusting relationships with the children and are able to establish a better understanding of each individual child's particular learning style.

#### **Evidence of change**

The quote below emphasises the positive way in which one teacher viewed their experience at Forest School.

*I feel very honoured to have shared the Forest School experience with the children. To have the opportunity to spend one year in Cantlop Wood is, like the children, something I will never forget. Together we have learnt and developed so much, which will make us all appreciate what is on our doorstep. Parents have told me that we take the environment for granted. To produce a musical instrument from wood has really impressed them. (Condover School staff member, Shropshire)*

The different perspectives on the children provided by Forest School enable the teachers to identify aims for improvement in the future for a particular child. In addition Forest School is a place where existing strengths of the individuals can provide a basis for building new strengths and skills. Parents can also gain new insights as the children tell them what they have done and become more aware of their surrounding environment.

#### **Evidence of change in parents' perception**

Jeremy's mother noticed that his vocabulary had increased because he was able to name a number of plants that he had found at Forest School. Leanne's mother has noticed that she now confidently climbs trees, identifies plants and seems to be able to name more things out of doors that she has done in the past. Parents can also gain confidence knowing that their child has experience of using woodlands. They may feel more able on family walks to let their child wander off footpaths and into the trees. (*Pegasus, Oxfordshire*)

Wayne's parents suggested that every parent should take the opportunity to go along to a Forest School open day, when parents are invited to attend, to see the children enjoy themselves. Chloe's parent noted that she seems more aware of the natural environment and enjoys pointing things out to them. Lisa's parent stated that she enjoys Thursdays the most (Forest School day) and makes no objections about going to school on those days. Her parents also said that Lisa always tells them everything about her Forest School day even though they do not hear much about her other day-to-day school activities. (*New Hinksey and Longnor, Oxfordshire*).

Some teachers felt that the ethos within Forest School provides a calm atmosphere in which the children could explore and experience the natural world.

*Fantastic! Children are happy, calm, helpful to each other. They have bonded as a group better than any group of children I have worked with in 23 years. (Longnor School staff member, Shropshire)*

*This experience has been incredibly valuable to our children. We have been lucky enough to have experienced a full year at Forest School and the benefits have been striking. These children now are independent and confident. They are keen to try new experiences both in and out of the classroom and are not afraid of taking risks. Their love of nature is growing as is their understanding of the world around them – and I mean real understanding that can only come through valuable practical experiences. (Longnor School staff member, Shropshire)*



## 8. Ripple Effects beyond Forest School

As a result of taking an active part in Forest School teachers gain the **opportunity to inform their own practice**, and to adapt their approaches to outdoor learning. For the children their enthusiasm for Forest School, means that they bring the experience 'home'. This can result in **changes to out-of-school routines** and behaviour with parents taking their children 'outdoors' more. Parental interest in and **attitude towards Forest School can change** over time; it gives them the chance to obtain a different attitude towards the outdoors such as their perception of risks.

In summary:

### ***Forest School is a place where...(features)***

- There are opportunities for school staff (not regularly associated with Forest School) to come along and see for themselves how the children work and play in an outdoor environment
- Open days and celebrations days are held so that others can gain an understanding of what takes place, and the children are able to demonstrate their achievements to parents and family beyond the immediate school community

### ***As a result...(benefits)***

- Parents take more interest in Forest School due to children's enthusiasm and are encouraged by their children to visit the outdoors more often
- With the focus on their achievements, children feel special

### ***This is often manifested by...(example behaviours)***

- Parents having an opportunity to gain a different view of the outdoors (e.g. the perceived risks)
- A different attitude from external practitioners towards the participants and towards the Forest School in general
- Improved self-esteem for the children (as a result of feeling listened to and their achievements valued)



Using Tools

*Helen Howes*

***And this is what we found...***

This evaluation highlights that the impact of Forest School does not just occur only in the child who is fortunate to have this experience, there are what we term 'ripple effects' within the family and within the wider community including the child's school. Many of the children wanted to take their parents to Forest School or to a woodland to display some of the knowledge they had gained from their Forest School sessions.

Open days and celebration days are held at many Forest School settings to allow parents, carers and siblings to gain an understanding of the Forest School process and allay any worries that parents may have about risks, the process of learning or exposure to inclement weather.

### **Evidence of change**

Leanne's mother noted that Forest School has had a positive effect on Leanne's older brother who has not been particularly keen on the outdoors or spending time in the garden. However now he asks to visit a local woodland and is very keen to be able to go to Forest School. The family goes together to woodland and takes the things that Leanne says are taken to Forest School such as hot chocolate, a snack and first aid. (*Pegasus, Oxfordshire*)

Both Wayne's parents have been to a Forest School session and as a family they very much enjoy playing together in woodlands, they say they enjoy the whole experience from the van ride to returning and '*kicking off their wellies*'. (*New Hinksey, Oxfordshire*)

Jeremy was very keen to take his family to Wittenham Clumps one of the woods they visited for a full day as part of their Forest School experience. (*Pegasus, Oxfordshire*)

One parent found that her son's experience at Forest School encouraged her to continue taking him for walks in woodlands and the countryside even though at first he is often resistant to the idea, because she stated that the actual experience was usually very successful. (*New Hinksey, Oxfordshire*)

At first parents are not always aware of what Forest School is, what takes place there and what sort of clothing it is appropriate to send their children in. One parent was surprised by the fact that the children go to Forest School in all weathers and questioned whether this was appropriate due to the very muddy state of her son's clothing. Another parent saw it differently:

*The benefits of Forest School far outweigh a few muddy clothes each week. The learning that goes on each week is valuable and far different from that which might happen in the normal curriculum. (Esta's parent, Finmere, Oxfordshire)*

This illustrates the need for parents to gain an understanding of what Forest School entails for their child and how their child can benefit from the experience.

### *Evidence of skills transferred from Forest School to other settings*

Many of the children have transferred some of the skills they have developed through their attendance and experience at Forest School to different settings such as the home and the classroom or at school in general. These positive changes for the children include physical skills, language improvement, interest in the environment around them, as well as increased confidence and the ability to interact with others. Some examples are outlined in Table 5.

**Table 5: Transferring skills developed at Forest School to other settings**

<b>Child's name</b>	<b>Comment by</b>	<b>School</b>	<b>Skills transferred to a different setting</b>
Greg	Parent	Shropshire, Longnor	He is now more concerned about wildlife and animals and is very protective of them.
Lisa	Parent	Shropshire, Longnor	She has become more confident at school and is mixing better with other children.
Fiona	Parent	Shropshire, Condover	Shows lots of interest in plants/trees and animals, and their habitats.
Erin	Parent and practitioner	Shropshire, Condover	Is so confident in the outdoors it's incredible. Now enjoys using tools.
Jeremy	Parent	Oxfordshire, Pegasus	His vocabulary has improved and he names plants. When he first started he always needed to come to the library where they met before going to Forest School with an adult. After a couple of months he started to feel happy enough to come to the meeting point with another child.
Serena	Practitioner	Oxfordshire, Pegasus	Looking out for things on other journeys and making comments which is unusual for her. Confident in going to new places and carrying out new activities.
Leanne	Parent	Oxfordshire, Pegasus	She has learnt the days of the week so that she can work out how many days she has to wait until Forest School. Confidently climbs trees on family outings. The family now go to Shotover wood every week. She knows what clothes to wear outdoors and identifies plants.
Merlin	Practitioner	Oxfordshire, Finmere	More confident in the classroom environment, offers information and participates in group discussions. Improvements in physical ability. Shows more perseverance in Physical Education classes as he is starting to see physical challenges as fun rather than frightening.
Esta	Practitioner and parent	Oxfordshire, Finmere	Forest School has enabled her to interact with older children who she might not normally work with. Her vocabulary has improved in class. Her balance has improved at home. Discussion and good interaction at school with peers about what they will do at Forest School.
Wayne	Parent	Oxfordshire, New Hinksey	He is less frightened and knows more about bugs and flowers.
Chloe	Parent	Oxfordshire, New Hinksey	More aware of the natural environment and enjoys pointing things out.
DL and KG	Practitioner	Worcestershire, Group 3	Calmer in the classroom after a Forest School session

## Summarising Features and Benefits

From the analysis of the data we have identified a number of specific features and benefits of Forest School that illustrate why it is unique and important. The benefits have been arranged under each of the features in terms of whether they present opportunities for:

1. **Learning** (*i.e. the child's physical and cognitive skills*),
2. **Growth** (*i.e. their attitudes and behaviour*) and
3. **Evaluation** (*i.e. formative evaluation for practitioners – including for evaluating practice.*)

### Feature

- **The use of a woodland (a 'wild' and essentially unpredictable) setting** that is framed by strict safety routines and established boundaries that allows the flexibility and freedom for child-initiated (not only issue-led) learning and other innovative approaches to learning to take place in a low-risk environment. This woodland setting is important particularly for children from areas of the country where there is little opportunity for contact with the natural environment.

### Direct and indirect benefits

1. Learning opportunities:	2. Growth opportunities:	3. Formative evaluation opportunities:
<ul style="list-style-type: none"> <li>▪ <i>The learning of safety rules such as the boundaries, the use of tools and how to behave around the fire underpin all other activities in Forest School.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Allows the children to learn about risks and to take risks that challenge them but do not put them at harm and in this way they are encouraged to take responsibility for their actions.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>The clear boundaries set in Forest School in terms of a child's adherence to safety rules make an ongoing assessment of their behaviour easier to track.</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>Children are allowed to respond naturally to the things they observe and the changes they experience around them.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Children are inspired to ask questions and develop a curiosity about the unfamiliar things they may find around them.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners can adapt future sessions based on their observations of the child week by week as to what excites their curiosity and desire to learn.</i></li> </ul>

<ul style="list-style-type: none"> <li>▪ <i>Lesson planning is different from the classroom. Although many of the learning goals are the same, due to the unpredictability of the surroundings the opportunities for child-initiated learning are many and varied.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>By responding naturally to new and unpredictable situations the child develops (and signals) his/her own learning styles and is allowed to learn at his/her own pace. (Learning how to learn)</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Through observation, practitioners can better understand how each child learns and behaves in different situations, and how therefore to make innovative use of the learning opportunities that arise.</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>Children are interested in the natural environment. It is important for those who have little contact with woodlands or greenspace.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Disassociation from any negative experiences of learning in the classroom can encourage a child's innate motivation to learn.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>For teachers who take part in Forest School, they get a new perspective of a child by seeing them in a different setting</i></li> </ul>

### Feature

- **Learning can be linked to the national curriculum** and foundation stage objectives whilst setting those objectives in a different context, and it is not focused just on the natural environment. By incorporating innovative approaches to learning (such as undertaking small and easily achievable tasks and creative activities) children are encouraged to develop their innate curiosity and motivation to learn. This is particularly important for those who find it difficult to assimilate knowledge in a strictly 'classroom' environment.

### Direct and indirect benefits

<b>1. Learning opportunities:</b>	<b>2. Growth opportunities:</b>	<b>3. Formative evaluation opportunities:</b>
<ul style="list-style-type: none"> <li>▪ <i>Elements of the curriculum can be presented in a practical way, providing action-learning opportunities that suit children with different learning styles</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>There is potential for embedding and transferring practical learning and experience from the Forest School setting back to the classroom and into home life.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Forest School provides teachers and practitioners with a formal yet 'non-classroom-orientated' arena for the assessment of a child's abilities and progress towards academic and other developmental objectives</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>It provides opportunities for the practical application of lessons taught in the classroom</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Where a concept is hard to grasp in theory in the classroom, it can be made explicit in practice in Forest School thus encouraging the confidence to learn more</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Where class teachers take part in Forest School they build up a richer resource of experience and example to draw on to help demonstrate theory back in the classroom.</i></li> </ul>

<ul style="list-style-type: none"> <li>▪ <i>Collecting materials for creative projects encourages a studied exploration of the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Children are able to experience a sense of achievement by engaging in creative activities that produce physical and easily presentable outputs.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners are able to assess the abilities and preferred learning styles by observing how each child approaches these activities.</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>Children are encouraged to use their imagination by only having the natural materials around them with which to be creative.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Working with found objects and materials aids the development of fine motor skills.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Through observation practitioners can see the child employing their creativity, and the opportunities for developing it further can be actively encouraged.</i></li> </ul>

### Feature

- **The freedom to explore using multiple senses** is fundamental for encouraging creative, diverse and imaginative play. The focus is on the ‘whole child’ (not just their academic ability) and how they can develop their own learning styles at their own pace whilst maximising the benefits from each experience they discover for themselves.

### Direct and indirect benefits

<b>1. Learning opportunities:</b>	<b>2. Growth opportunities:</b>	<b>3. Formative evaluation opportunities:</b>
<ul style="list-style-type: none"> <li>▪ <i>Children have the space, freedom and desire to explore as the boundaries are larger and less familiar than the playground or classroom.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Children gain confidence to do things without help or guidance from an adult.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners can gain an understanding of when to encourage and when to stand back and let the child have their independence.</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>Learning how to explore a woodland environment using sight, sound, smell and touch and then describing what they discover encourages development of language and communication skills.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Constant stimulation encourages development of the senses whilst in the Forest School setting.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners can gain a better understanding of how each child uses his/her senses.</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>The child is encouraged to explore new ways of doing things and learning so they can find their own strengths.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Existing skills are identified and become the ‘way-in’ for a child to develop new skills. (e.g. A withdrawn child who finds they are the best at balancing on a log can experience being the leader in follow-my-leader).</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners are able to identify a child’s existing skills (perhaps some that they were previously unaware of) as they observe them learning how to deal with unfamiliar situations.</i></li> </ul>

## Feature

- **Regular contact for the children over a significant period of time** (e.g. all year round, in all weathers). Regular can mean anything from fortnightly during a school term to one morning, afternoon or day every week for twelve months or more. This is coupled with a clear set of safety routines and boundaries that allow children to develop a responsible attitude to risk whilst becoming familiar and confident enough to explore and interact with an ever-changing natural environment.

## Direct and indirect benefits

1. Learning opportunities:	2. Growth opportunities:	3. Formative evaluation opportunities:
<ul style="list-style-type: none"> <li>▪ <i>Each child gains the opportunity to observe how others adapt and respond to the changing environment.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>With teachers and practitioners regularly sharing new experiences together with the children and dealing with the unpredictable, a new bond of trust is established between them.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners are able to spend more time building trust and getting to know the children's usual (and unusual) behaviour.</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>This encourages the child to develop his/her own learning styles at his/her own pace.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>It also allows a child to gain confidence in their new surroundings and their abilities as they build on their skills week by week. The child becomes familiar with and comfortable in the woodland setting.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>And it allows practitioners to build up a comprehensive picture profile of a child over time.</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>This provides an ongoing opportunity for children to observe and learn about the changing of the seasons (as well as learning how to keep warm and dry).</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Gaining general experience for dealing with the outdoors.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Seeing how children cope in bad weather – e.g. if it is stopping them taking part or if they don't seem to notice then this provides a good indication of levels of engagement and enthusiasm of each child.</i></li> </ul>



## Feature

- **A high adult to pupil ratio** (e.g. groups are small with approximately twelve children per session) allows the freedom for children independently to undertake hands-on tasks and play activities that challenge them (both physically and mentally) but do not put them at undue risk of harm. It also allows practitioners quickly to get to know the individual learning styles, abilities and characteristics of the children in their charge.

## Direct and indirect benefits

1. Learning opportunities:	2. Growth opportunities:	3. Formative evaluation opportunities:
<ul style="list-style-type: none"> <li>▪ <i>Time and space marked out as part of the school routine for teachers to be able to focus attention on individuals, and nurture an effective learning environment.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Children get very active hands-on attention from practitioners.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners are able to spend more time building trust and getting to know the children's usual (and unusual) behaviour.</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>Children are free to explore and use the natural materials around them in their imaginary play.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Children are able to learn how to initiate their own activities, as well as work co-operatively to achieve their own goals.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners can observe how children work together in groups and on their own, which ones are the leaders and which ones are followers. .</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>The child learns to balance, use their strength (e.g. to climb trees).</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Being encouraged to run around in uneven territory allows for the development of physical stamina and co-ordination.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Practitioners see the child develop physically.</i></li> </ul>

## Part 4: Conclusions and Discussion

### *Cross-cutting themes*

By working with Forest School Leaders, practitioners, teachers and parents and by tracking the progress of a group of twenty-four individuals over approximately eight months this evaluation has highlighted key features and identified important ways in which Forest School benefits children's education and personal development. The themes that emerged from the analysis of the data cut across each case study and help strengthen the case for them being generic to Forest School. This is important as similar findings emerged from the Welsh study in Phase 1 of this evaluation (Murray, 2003).

What we have done in Phase 2 is identify in greater detail the impacts of Forest School on a group of children over a longer period of time. It is clear from the data, (and in particular the observations from teachers and parents not directly involved with delivering Forest School) that some of the children displayed surprising changes in behaviour which were wholly or partly attributable to their involvement in Forest School. In other areas it is more difficult to say whether the children may have improved anyway through natural development as they get older and become more used to their peers or to nursery and school life.

In either case Forest School provides an important opportunity for regular and critical observation of the ways that children take advantage of given freedoms (within a controlled setting) to express themselves physically and verbally. To whatever extent significant changes are attributable directly to the intervention, practitioners are able to identify if and when those changes have taken place by studying the way children are relating to each other, the grown-ups and the wider world around them.

### *The Forest School ethos*

Forest School has a particular ethos underpinning it that is outlined in the **Features and Benefits** section of this report and highlighted by the analysis of the data. Some schools are struggling with funding and cannot afford to transport children to Forest School and they are bringing the Forest School philosophy into their school grounds by creating more natural areas and attempting to incorporate that Forest School ethos into the work that takes place there. While this is a good idea, we suggest that it is woodlands (and their essential 'wildness') that has a particular advantage over other habitats as their structure and layout allows for greater adventure and mystery. Much has been said about the effects of Forest School on a child's independence and confidence (including self-confidence). Woodland provides greenery and cover affording opportunities to hide and create secret places; a feature that can be particularly important for this aspect of a child's development. (Guldager and Carstensen, 2004; O'Brien, 2004; O'Brien, 2005).

Long-term contact with Forest School involving regular and frequent sessions is crucial in allowing children the time and opportunity to learn and develop confidence

at their own pace. The more relaxed and freer atmosphere provides a contrast to the classroom environment that suits many children who learn more easily from practical hands-on involvement.

Psychological research has shown that children's senses are stimulated by nature. Research has also highlighted that these experiences form children's relation to natural areas and that this is often remembered into adult life (Kaplan and Kaplan, 1989; Ward Thompson, et al. 2002). Pyle (2002: 315) argues that '*when experiential contact with nature, in the broadest sense, is diminished, negative impacts spread out to every cultural level*'. Children lose many physical, emotional and intellectual opportunities such as climbing trees, exploring special places, and getting off paths to discover hidden spaces for themselves.

### *Mainstreaming Forest School*

Forest School is for all ages and abilities, although in England the major focus at present is on Early Years settings. The practitioners involved in the case study areas in this report would like Forest School to become more mainstream within Early Years education so that it is not considered as something separate from what goes on in the classroom but is an integrated part of the learning environment.<sup>15</sup>

On the ground it is important that parents and teachers are involved from the beginning in order to be able to gain an understanding of what Forest School entails. Both Shropshire and Worcestershire held celebration days where this understanding was encouraged. Open days are also held and parents are encouraged to come along and see Forest School in action.

In terms of the bigger picture there is an important link with the Green Paper *Every child matters* (Chief Secretary to the Treasury, 2003) which outlines five outcomes identified in consultation with children as key to well-being in childhood and later on in life. These were:

1. Be healthy
2. Stay safe
3. Enjoy and achieve
4. Make a positive contribution,
5. Achieve economic well-being.

Table 6 highlights four of the outcomes in the framework and identifies where Forest School can make a contribution (DfES, 2004).

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<sup>15</sup> Personal communication with the pilots' evaluating practitioners (Forest School leaders).

**Table 6: Some of the DfES goals and bullet points as outlined in *Every child matters: change for children in schools* (DfES, 2004)<sup>16</sup> and information on how Forest School can contribute.**

<p><b>Be healthy</b></p> <ul style="list-style-type: none"><li>• Physically healthy</li><li>• Mentally and emotionally healthy</li><li>• Healthy lifestyles</li></ul> <p>At Forest School children are physically active a lot of the time and their stamina improves as they go through their Forest School sessions. Their experience can also help to lead to the development of healthier lifestyles as children ask parents to take them on trips to woodlands and green spaces outside of school times. As the children gain confidence and improve their self-esteem this can impact on their emotional and mental well-being.</p> <p><b>Stay safe</b></p> <ul style="list-style-type: none"><li>• Safe from accidental injury or death</li><li>• Have security, stability and are cared for</li></ul> <p>The 'wild', and yet controlled, safe environment of Forest School ensures that children taking part naturally learn to assess risk and are encouraged to make sensible and informed decisions about how to deal with unfamiliar and unpredictable situations (such as exploring or climbing trees, using tools to build shelters and dens). Much of the learning for a child comes as a result of the opportunities they have for testing their own abilities in a real life context.</p> <p><b>Enjoy and achieve</b></p> <ul style="list-style-type: none"><li>• Achieve stretching national educational standards at primary school</li><li>• Achieve personal and social development and enjoy recreation</li></ul> <p>Forest School sets learning in a different context for children where they can undertake a range of practical activities and carry out small achievable tasks. At Forest School children can develop their team working skills and also learn to become more independent. Those who are unfamiliar with woodlands and green spaces can become confident in using them and this can form the basis of a life-long relationship with natural spaces.</p> <p><b>Making a positive contribution</b></p> <ul style="list-style-type: none"><li>• Develop self confidence and successfully deal with significant life changes and challenges</li><li>• Developing enterprising behaviour</li></ul> <p>Forest School helps children to develop their confidence. As they become familiar with Forest School they can take their new-found confidence into school and into other areas of their lives. Forest School can be particularly effective for children who do not do well in the classroom environment. Children learn to solve problems and be creative and imaginative at Forest School thus showing enterprising behaviour.</p>
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<sup>16</sup> See [http://www.everychildmatters.gov.uk/\\_files/F9E3F941DC8D4580539EE4C743E9371D.pdf](http://www.everychildmatters.gov.uk/_files/F9E3F941DC8D4580539EE4C743E9371D.pdf)

### *Outdoor learning and risk*

A report by Thomas and Thompson (2004) strongly suggests that every child should be entitled to outdoor learning. This evaluation shows the value for children of contact with the outdoors, particularly woodlands, which is limited for many children in modern society. Opportunities for outdoor learning have decreased due to a range of issues such as health and safety concerns, a lack of funding and pressures to meet curriculum targets. The report goes on to argue that the environment is a resource that is underused by children. The Campaign for Adventure (Lewis, 2005) is concerned about the current climate of risk aversion and advocates seeing the positive side of risk, for example when children test their skills and learn to face new challenges. Forest School demonstrates that effective measures can be taken to reduce and manage risk to an acceptable standard.

Understanding risks and knowing how to cope with risk is an important part of the Forest School process and indeed its ethos. There appears to have been an increasing concern over a number of years among a range of groups including parents and schools that risks should be eliminated. Concerns about danger and liability have reduced many of the trips that schools make outdoors. A recent survey found that many parents were very concerned with the safety of their children and were reluctant to let them out of the house (DCMS, 2004).

As a result there is growing concern among environmentalists that many children and young people are not having contact with nature. Research has shown that children who use woodlands when young are more likely to do so as adults (Bell, et al. 2003). If this connection to the natural environment is lost due to parents' concerns about children's safety or because of the dominance of indoor activities, centred on television and computer use, then there is a chance that a vital opportunity for connecting people with and establishing an awareness of the natural environment is being lost. The Real World Learning campaign is currently lobbying the government to promote outdoor education and out of school activities for this very reason (Cooper, 2005).

The government has realised that the reduction of the number of school trips in recent years due to concerns about safety and liability might actually be detrimental to children's development and so they are now encouraging a greater emphasis on the use of the outdoors for learning: '*Outdoor education gives depth to the curriculum and makes an important contribution to students' physical, personal and social education*' (Ofsted, 2004: 2).

### *Self-appraisal*

In terms of the action research process undertaken in this evaluation, stakeholders in each of the case study areas reported that this was a very useful way to learn from each other about the benefits and problems of running and evaluating Forest School. The recording practitioners gained a sense of ownership of the work because they had been involved from the beginning and had themselves developed the propositions that they felt outlined how Forest School had an impact on the children.

Because of the accepted culture of evaluation as being 'the role of the outsider', the Forest School leaders in the case study areas had not previously concentrated this much energy and effort collecting such detailed information on specific children. They found that using the self-appraisal methodology identified a useful and hitherto unexplored aspect of their work; by doing so they were able to highlight significant changes related to children's development as they happened, and as a result constantly review and improve their practice. Oxfordshire's approach was viewed as a particularly useful framework for data collection due to the production of baseline and end scores for each child and weekly comments for each child on the different propositions.

*Action research has been defined as a 'participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview... It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.'* (Reason & Bradbury, 2001:1)

It is clear that this not only describes the self-appraisal approach undertaken for this study and recommended as a regular part of the delivery and management mechanisms for all Forest Schools, but also asserts Forest School itself as a formative evaluation tool for teachers and practitioners to assess and better understand the children in their charge, in a way that relying just on classroom and academic performance indicators can miss.

## Recommendations

We outline recommendations below based on the two phases of evaluation carried out by **nef** and Forest Research and based on the findings of previous evaluations that have taken place (Massey, 2004; Davis and Waite, 2005). These provide potential ways in which the benefits of Forest School could become more widely disseminated and accepted.

- Forest School benefits many children and should be used on a wider basis as a vital part of children's outdoor learning experience and in order that many more children have the opportunity to experience this as part of their overall education. Where funding is restricted criteria should be developed to decide which children, in particular areas, would gain most from the experience. These could be kinaesthetic learners, children lacking in confidence, children who are having particular difficulties in coping with learning in a classroom environment, and children in disadvantaged areas who may have little contact with or experience of the natural environment.
- The self-appraisal action research approach used in this evaluation is an effective method for practitioners to use to gain an understanding of best practice, the importance of Forest School and the way the setting impacts on children's development. This approach could be used more widely developing the learning capacity of all those involved.
- Consideration should be given in the creation of new woodland to its distance from, and accessibility by, local schools. This is already taking place to a certain extent through the Public Benefit Recording System (devised by the Forestry Commission and North West Development Agency) being used in Northwest England concerning the creation of woodland on derelict, underused or neglected land (Newlands, 2005). Distance to schools and the number of local schools is one of the criteria used to assess public benefit in this system. The Woodland Trust through its 'Space for people' project mapped and assessed the amount of accessible woodland in the United Kingdom and from this it has developed a Woodland Access Standard which sets targets for providing new access in existing woodland and for the creation of new woodland (Woodland Trust, 2004). This Standard could be used to explore how accessible woodlands are to schools, particularly in disadvantaged areas.
- Tracking children over a longer period, such as 2-5 years, is needed to see whether improvements made at Forest School last when the child has stopped going. It may be that a certain length of time (e.g. 1 year) is needed at Forest School if the benefits to the individual are to last in the longer term. This particular issue needs to be assessed thoroughly.

- Local Education Authority support is crucial for an effective Forest School. The three case studies in this report all benefited from this support. *‘There is a lot of enthusiasm, energy and expertise within the Forest School movement. The most effective Forest School schemes so far are those which enjoy Local Education Authority support and are being used to help meet the Foundation stage’* (Forest Schools England response to the Education and Skills select committee enquiry, 2004)
- The role of Forest School in physical development has health implications and should not be overlooked. Forest School could be one of the effective ways in which schools that are part of the Healthy School Standard (a government initiative to promote pupils’ emotional and physical well-being) could meet the requirements of the scheme in an interesting and innovative way.
- Successful examples of Forest School should be promoted widely to educationalists, environmentalists and parents so that a better understanding is gained concerning what Forest School is, the impact it can have on children and how learning takes place.
- We suggest that where practitioners are able to incorporate a rigorous self-appraisal methodology into the way that they deliver the setting this results in two important benefits. Firstly, that day-to-day practice is improved and enhanced as practitioners begin to view the everyday occurrences in the setting with an evaluator’s critical eye. Secondly, this means that Forest School can itself function as an accurate and insightful formative evaluation tool for teachers and practitioners. Once embedded in standard education practice, the regular contact and different perspective that the setting gives can be an efficient way to assess the development of characteristics, abilities and skills of children in a way that complements the ongoing existing assessment currently done of classroom and academic performance.



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