Forest Schools: an evaluation of the opportunities and challenges in Early Years Final Report January 2005

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- training of 7 Forest School assistants for 4 forest school programmes
- participation in programmes by c. 60 children drawn from 3 settings in Devon
- strategic evaluation in the form of two play projects to inform possible future funding of forest schools based on research and a literature review
- development of the Play Club website:
  
  http://latis.ex.ac.uk/forums/zero14plus/viewforum.php?f=7
Executive Summary

Inspired by practice abroad, a few individuals over the past decade have been developing programmes in Somerset for children to learn in the outdoors, specifically in woodlands or a forest. Interest in the concept of Forest Schools has spread to other counties and enthusiasm is increasing as evidenced by the growing demand for programmes and training. A number of evaluations of programmes have now been produced, which seek to establish the benefits of this outdoor approach to learning and to gain support for further expansion. Many of those involved would like to see Forest School embedded within the mainstream educational experience of all children. The research reported on here is the product of a concerted effort to undertake research within a partnership including funding bodies, primary schools and the University of Plymouth to further explore the opportunities and challenges that Forest School presents.

This report summarises research undertaken by undergraduate students in the academic year 2004 in three Forest School programmes, where they acted as assistants. A fourth programme observed by a researcher at the University of Plymouth is added to extend and complement students’ research. The findings from these pilot projects, organised into two ‘play projects’ to meet the requirements of Devon EYDCP (zero14plus), provide evidence of the ways in which social and language development are supported by the principles and facilitative methods used in Forest School. An overview of the contribution of Forest School to the early years curriculum, through mapping of Forest School activities against the six areas of learning, is also included. Edited highlights from students’ research projects, which give a flavour of the rich diversity of outlooks gained from this research, are found in Appendix 3.

The research is exploratory in nature and arises from the individual interests of the students. A broad range of methods was used from which richly varied perspectives on Forest School were drawn. Themes that were covered include self-esteem, children’s perspectives, language development, children’s learning in the outdoors, the role of the Forest School leader and parents’ views. The students’ projects provide indications of the depth and range of influences at work in Forest School programmes, however due to the exploratory nature of the research and the small numbers involved no definitive claims can be made. One of the salient findings of this collaborative research is the extent to which each programme varies according to the children attending, the leaders and supporting staff, the site used and the weather experienced! This confirms the importance of a process of self evaluation for each programme (Murray, 2003). However, certain messages emerge as common to all and recommendations are made that centre on the clarity and quality of communication that is needed between Forest School leaders and those from the mainstream school. These principles point to possible ways forward for the future development of Forest School.
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1. Introduction

1.1. What is Forest School?

Forest school is a particular kind of educational programme that takes place in the outdoors, preferably in a natural wooded area. It is characterised by positive relationships, achievable tasks and fun. Anecdotal evidence suggests that people involved in Forest School programmes become enthusiastic about their work and that they attribute large benefits for children to the outdoor experiences.

The concept of ‘Forest School’ originated in Scandinavia and, although the idea spread to many other countries, it is best known as having been developed in Denmark during the 1980s in relation to early years programmes. The observed benefits of increased confidence and the growth of language competence and social skills in young children resulted in an awareness of the value of outdoor education. Danish practitioners recently (Olsen and Pederson, 2003) reported that their aim in Forest School is to create an environment where children can develop into well-balanced and independent human beings with good relationships to others.

The notion of a Forest School was brought to the UK in 1995 after a group of practitioners from Bridgwater College in Somerset returned from an exchange visit to Denmark (Bridgwater Forest School, electronic source). They were inspired to run similar programmes in their early years setting which is now the Bridgwater Early Excellence Centre. The ideas and practices observed in the Danish Forest Schools have been developed and adapted there within the English cultural perspective and in the midst of the many educational changes taking place over the past 10 years. As a result Bridgwater College has been recognised as the main centre for Forest School education and training. It has also acted as a beacon for other Forest School projects and developments such as in Oxfordshire, Worcestershire and Wales. It has been reported (Eastwood and Mitchell, 2003) that there are now numerous local authorities and other organisations that are looking to establish similar projects of their own.

There is a long history of outdoor education and play in the UK and the importance of providing young children with access to the outdoors was recognised by early years pioneers such as Margaret McMillan at the beginning of the 20th century. Records show that there was a dramatic improvement in the health of the children attending McMillan’s open-air nursery as well as huge gains being made in their social, emotional, intellectual and spiritual health (Bradburn, 1976). Although it was fears of unfit war recruits which prompted passing legislation that gave attention to ‘recreation, social and physical training’ in education (Cook, 1999), there were many other traditions such as the nature study movement, environmental education and outdoor adventure activities which have positively contributed to a culture of outdoor education in the UK (Rickinson, Dillon, Teamey, Morris, Choi, Sanders & Benefield, 2004).

Forest School, as it is conceived in the UK, fits into this traditional base but also reflects the current drive for inclusivity, the recognition of individual needs, an intelligent assessment of risk and safety issues for children and a renewed awareness of the learning potential of the natural environment. Although the perceived benefits of Forest School have been much celebrated, there is little in the literature to indicate clearly what ‘Forest School’ is. However, some principles that underpin Forest Schools have been identified:

- Forest School is for everybody
• Forest School is a process which builds on an individual's innate motivation and positive attitude to learning, offering them the opportunities to take risks, make choices and initiate learning for themselves
• Forest School is organised and run by qualified Forest School leaders
• Forest School maximises the learning potential of local woodland through frequent and regular experiences throughout the year
• Forest School helps everyone to understand, appreciate and care for the natural environment (Eastwood and Mitchell, 2003).

1.2. Why an evaluation?
Although there have been some evaluations of previous programmes of Forest School (Murray, 2003; Eastwood and Mitchell, 2003; Bower, Barclay & Hawkey, 2002), much of this has been from within the Forest School movement. Furthermore, the context of each Forest School may be different and one of the concerns of the Forest School movement has been to kitemark what makes Forest School distinct from other outdoor activities for children. With the programmes evaluated here two different leaders took part and this allows some comparison of methods. There were also different settings for Forest School and this should be considered in its effect on the provision of Forest School. The students' work took place between January 2004 and May 2004 and a further programme in October /November 2004, made possible by the additional funding from FEI, has been studied by Sue Waite, while another programme (not funded by these grants) will be followed by Bernie Davis in summer 2005. As the evaluation is being submitted in January 2005, the report focuses on the students' work and preliminary findings from the fourth programme.

2. The programmes
The Forest School programmes that we were evaluating took place over six weeks with a morning or afternoon session each week. The sessions took place regardless of snow, sun or rain. It was not a 'fair-weather only' activity. The Forest School leaders identified a suitable site for each programme. This needed to be large enough for group activities with distinct areas for a camp, games, fire pit, work with tools and free exploration. As a rough guide it needed to be about three times the size of the used area to prevent over-use of these sites within it. Tree cover from a variety of broad leaf species with a coppiced shrubby understorey was ideal. The sites were inspected for health and safety purposes. The site should not be open to the public to ensure the safety of the children in exploring. Reasonable vehicular access and permission to light fires from the land owner were also necessary. In two cases the site was a narrow strip of woodland at the edge of the University playing fields which necessitated transporting the children from school to the site; another was a wooded area within the school grounds and the third was an orchard within walking distance of the school. One school who was to have taken part withdrew when their school environmental area was not deemed suitable by the Forest School leader and because of their own concerns about the additional time needed for transportation and because part of their motivation had been to extend the use of their recently developed environmental area. The provision of hard pathways however would only allow limited opportunities for active exploration. This points to a possible role for Forest School leaders in advising schools how to develop their sites to maximise opportunities for Forest School activities. The four programmes were run by Forest Inspirations (www.forestinspirations.org.uk); two by one leader, two by another. In addition there were at least two Forest School assistants from undergraduate courses at University of Plymouth who had been trained by Forest
Inspirations on each programme. In the first three programmes students were undertaking the research as part of their assignments for 1) a research module, 2) an independent study module or 3) a work-based learning module. The school sent at least one member of staff. This was sometimes a nursery assistant or teaching assistant, sometimes the classteacher. The Forest School leaders had made the point that continuity was important so that Forest School assistants had to commit to regular attendance at the sessions. This, however, was not always the case with the school staff. The Forest School leader planned each session, usually building on the debrief held at the end of the previous session. Forest School assistants were also sometimes asked to plan an activity. The list of activities included is described in Appendix 1. The debrief was an opportunity for the leader and Forest School assistants to discuss the activities and how the children responded to them, their peers and the adults at each session. This was taped and a summary circulated to those involved. In some cases the classteacher was also asked to send a report on the session to the leader. These provided material for a report to the school for teachers and parents at the end of the programme. This was sometimes accompanied by a book of photos and/or children’s work. The fourth programme which took place six months later was conducted in an orchard in the vicinity of the school and followed the same pattern.

3. The researchers
Seven students at the University of Plymouth were trained as Forest School assistants by Forest Inspirations, and provided assistance on four programmes. They also worked as a collaborative research group at the University discussing their research design, data collection and emerging findings. Summaries of students’ individual research projects under their tutors’ guidance and co-ordination can be found in Appendix 3 of this report and are published on the Devon EYDCP (zero14plus) website (http://latis.ex.ac.uk/forums/zero14plus/viewforum.php?f=7). The two project leaders organised the programmes and guided the students’ research design and data collection. They have also personally collected data in further case studies to follow up some issues arising from the students’ work. This collaborative and iterative process allowed a grounded approach to the collection of data and permitted a broad range of methods to be deployed, which introduced richly varied perspectives on Forest School and will serve to inform future research design.

4. Ethics
All students had CRB checks and all schools and parents were sent a detailed ethics protocol giving permission for their children to take part in the programmes and research and allowing Forest Inspirations and the university to use photos to illustrate their findings. Only one parent asked that her child should not be part of the research or have her photograph used.

5. The Context
5.1. The schools
The three schools that have taken part in this pilot project were chosen to represent different settings in Devon. One with a roll of c. 200 is based in a mid-Devon town but is fortunate in having a wooded area as part of the school grounds. The curriculum for the children in the reception class is based on principles that take full account of the particular needs of young children as well as the early learning goals in all areas of their learning. Physical education now includes a unit of work on outdoor and adventurous activities (OFSTED, 2003).
Another school with c. 130 pupils is based in a suburb of considerable economic and social disadvantage in a large coastal town with a state nursery attached. It has experienced considerable staffing changes and the standard of attainment on entry is low (OFSTED, 2003).

The third with c. 100 pupils is in a village community and has a highly transient population due to a local military service base. It too experienced staffing changes but is now an improving school (OFSTED, 2000). This latter school has taken part in two programmes to enable us to examine the effect of a longer experience of Forest School in a mainstream school on the views of mainstream staff and the embedding of principles of Forest School in mainstream practice.

5.2. The children

As the research was located in the Early Years team at the University and part funded by Devon EYDCP (zero14plus), the participants were chosen from Reception and Year 1 classes.

Forest School demands low adult-child ratios to operate. Schools were therefore asked to select 12 children for the programme to allow a ratio of 1 adult to 3 children or lower. Criteria that schools used to select children varied. One included the whole reception class, resulting in 16 children sometimes being present. Another allowed the children themselves to choose between Forest School and gardening activities and the other selected children who would ‘behave well’ (classteacher) for the first programme and children who ‘had not had the opportunity last time’ (classteacher) for the second programme. This variability in selection criteria calls into question the principle that Forest School is for everybody. In the current funding situation, however, such an ideal is far from possible.

6. Our research

6.1 The context

As we have described, an external evaluation of Forest School programme was considered important as it offers another outlook to self-evaluation that is an integral part of Forest School and internal mechanisms such as the tool kit developed by Murray (2003). We recognise however, that there is an inherent tension between understanding the process as an outsider and being sufficiently objective as an insider. We determined to work within a partnership of Devon EYDCP (zero14plus), the Forest Education Initiative and local forest school networks with mainstream schools and the University. In practice, because of time constraints on the students, the partnership has not included mainstream schools as fully as we would have wished but parental and children’s views have nonetheless been included. The differing needs of our funding bodies, while introducing some difficulties such as an interrupted funding stream and particular requirements for formatting of the report, have enriched our research as we have been conscious of distinct perspectives and needs in terms of evaluation. Devon EYDCP (zero14plus) was interested in how Forest School could contribute to outdoor play as a priority area and the development of training opportunities; the Forest Education Initiative locally wanted to provide Forest School experience for children but also at a national level to gain an external view of Forest School to triangulate with recently developed self evaluation techniques (Murray, 2003). Our intentions in the projects are outlined below.

6.2 Aims

• To develop a partnership approach to research and delivering local Forest School training courses through establishing a network between interested parties.
• To report on the piloting of Forest School programmes in Early Years settings.
• To provide insights into the experiences and impact on individual children, staff and schools during the programmes.
• To make recommendations to Devon Zero-14 Plus and the Forest Education Initiative to inform future policy and practice in relation to Forest Schools and outdoor play.
• To disseminate Forest School awareness through the Play Club website forum and presentations.

7. Methods
Both funding bodies were interested in developing a network to stimulate interest and an awareness of Forest School and they also wanted external academic evaluation of the potential benefits. The Forest Education Initiative funded the project as complementary to other research work, which is developing self-evaluation tool kits (Murray, 2003). The research questions addressed within the evaluation took a variety of perspectives to provide triangulation drawing on parent, pupil, teacher and Forest School leaders’ views as well as the researchers’ participant observations. The power of these different narratives of Forest School in providing a broader picture of Forest School is illustrated by edited summaries of the students’ assignments attached as Appendix 3 and published on the Devon EYDCP (zero14plus) website: (http://latis.ex.ac.uk/forums/zero14plus/viewforum.php?f=7).

The data collection included the following methods:
• Participant observation in Forest School programmes
• Videotaped and photographic records of sessions
• Interviews with teachers and children
• A range of elicitation techniques with children
• Questionnaires to parents
• Forest School leader's evaluations
• Mapping of a site and children's use of it.

In addition to informing the students’ individual assignments, the raw data collected by students and one of the researchers have been re-analysed to form the basis of this report.

The focus for Devon EYDCP (zero14plus) was how Forest School fitted within play for early years.
For this reason, the research is summarised below within two distinct Play Projects:

8. Play Project 1
An evaluation of young children’s personal and social responses to Forest School activities, including a study of the interaction between adults and children.

8.1. Introduction
It has been suggested that Forest School offers many opportunities to develop self-esteem. As self-esteem appears to develop in response to early learning experiences and influences the learning experiences that follow, this suggests that it is wise to invest in what are considered ‘good learning experiences’ for young children. Several students used participant observation to examine the context and children’s response to Forest School in relation to self-esteem. Parents’ views and those of a mainstream teacher were included through the use of questionnaires and a number of techniques (group interviews, drawings, observation, EEL scales (Pascal & Bertram, 1997) and field notes) were used to
elicit the children’s views on their experience in Forest School and their attitudes to outdoor play. A further study (Maciver, Appendix 3C) looked at how the Forest School leader interacted with children, using the EEL project adult supportive intervention and adult engagement observation scales (Pascal & Bertram, 1997) as well as more informal observation which gave some insight into pedagogy. The following section details what research so far has suggested the personal and social benefits of Forest School might be.

8.2. Previous research
It would seem from anecdotal evidence and the existing evaluations that much satisfaction and enjoyment are experienced in the Forest School programmes. The educational principles offered and the challenge and diversity of the outdoor environment both contribute to the children’s positive feelings and contribute to the progress that is achieved with each session. It appears that this is an excellent environment for children to learn both on a personal level and in relation to others.

Self-esteem is seen as underpinning social development. Roberts (2002), in a review on self-esteem in the early years, draws on theory and research to illuminate the child’s voice and the adult’s role in supporting the development of self-esteem. She has synthesised an understanding of what is important in promoting self-esteem into a number of key statements:

- Learning involves struggle and adjustment. Too much struggle is overwhelming. Too little struggle means no adjustment.
- Some learning skills come naturally. These include exploring, questioning, experimenting and learning from mistakes.
- Children are encouraged to learn when someone knows what they especially want to do and can nearly manage, and helps them to manage it successfully.
- Recognising the development of children’s patterns of learning or schemas, leads to high self-esteem.
- Children learn well with a combination of appropriately high expectations and appropriately high self-esteem.

Research done thus far on Forest School suggests that there are tangible benefits for children’s personal and social development. Maynard (2003) found that the children’s expressive language skills increased during the Forest School programme which impacted on their feelings of self-esteem and self-worth. The research also highlights the correlation between self-esteem and academic achievement.

Massey in a year-long study on Forest School programmes in Worcestershire (2002) found that:

- all the children show greater confidence and independence with the activities and in the care of the natural environment, providing them with a sense of success and raised self-esteem
- the children took the opportunity to develop relationships with others and to form new relationships and friendships with peers and adults. This has ensured that towards the end of their programme the children had begun to work as a group considering the needs of others, as well as individually
- the children gained in confidence in adapting to new situations and in trying new experiences, choosing activities independently and their confidence in self-initiating tasks developed dramatically (p. 2).
She attributed the allocation of time and the provision of a climate where small achievable steps could be made as being important to developing good self-esteem and a good self-image.

In short, the literature available (Bridgwater College, 1993; Massey, 2002; Maynard, 2003; Eastwood & Mitchell, 2003; Murray, 2003) confers upon Forest School the ability to build within children social skills, self-esteem, confidence and independence and discover their abilities without fear of failure or criticism.

Our Findings

8.3. The children’s point of view

Accessing the children’s voice is very difficult, especially in the early years when language is still developing. The studies were limited by small numbers and relatively unfamiliar adults asking questions. The following findings must therefore be taken as indicative rather than conclusive. More might be gained through working alongside mainstream staff who have a longer standing relationship with the children, although conversely this might mean children conform to expected responses. For example, a teacher expressed surprise at the children feeling able to use the word ‘boring’ in Forest School, which would be unacceptable in school. Using video clips as a vivid memory aid and getting children to explain to others may also help to support feedback. (See Winsor, Appendix 3 H, for more detail about accessing the children’s voice.)

One student (Britton, Appendix 3A) asked children whether they liked being outside and what sorts of activities they do when outdoors (see Figure 1)

![Figure 1 Children's outdoor play](image)

The types of outdoor activity represented, however, are limited by the questions framed. Another student (Paulin, Appendix 3D) asked children (n=32) from one programme run within this research and from another school who have run forest school before, about playing outside and their anticipation and subsequent impressions of forest school. All said they liked playing outside, indeed preferred this to indoor play. 13 said they liked imaginative play outside; seven mentioned playing with equipment such as skipping or climbing frames; six referred to free play ‘running around’, ‘having fun’ and ‘getting dirty’; five said they didn’t often play outside and four mentioned practical activities such as walking the dog.
20 children said they were excited and happy about Forest School, two felt sad. The children were not asked what had made them happy or sad. This may be difficult for pupils of this age to articulate. As part of Forest School, the children indicate their enjoyment of the session at the end either by thumbs up or down or showing happy or sad faces on ‘tree cookies’ (sawn slices of branches) as shown on the front cover of this report. It is important when this happens that all children are asked what they enjoyed or didn’t like or there is a pressure for children to indicate enjoyment if they only have to explain a negative evaluation. 14 out of the 20 who had been to a previous Forest School could not remember how they felt. This might indicate that such experiences need to be ongoing to maintain benefits. The activities they mentioned as enjoyable were dens (6), hide and seek games (7) and cooking on an open fire (8).

They thought they had learned to make things (5), to use knives (4) and to saw (4) but five said they didn’t know what they had learned. This may also have been a difficult question for young children learning in an experiential way. It may be because practical learning goals rather than personal social goals had been made explicit, for example, ‘today we are going to learn how to use a saw safely.’ This may indicate a need to make all the learning goals for different activities clear to children. If part of the intention is for children to work well together, it is helpful if this is stated.

Seven children expressed a preference for working or playing alone, while 20 said they preferred to work or play with others. It is interesting that Forest School activities often require cooperation but team working is not one of the explicit aims (www.bridgwater.ac.uk/forestschool/earlyyears.asp). However, all the children reported that they thought Forest School had allowed them to play as they wanted. This mirrors Forest School aims of having a child-led pedagogy (ibid.)

31 children said they felt good in the woods although four were also scared and one said they were frightened. While those who had taken part in the 6-week programme did not report any Forest School activities at home, five of those who had been involved in repeated Forest School said they had used tools at home and three said they had made dens. This may further indicate the importance of sustained experiences for practical activities to be used in other contexts.

In another study (Waite), when asked before Forest School began what they liked to play outdoors, children spoke of indoor play, organised games, trampolines and climbing frames. Afterwards, the mud holes they had used for imaginative play and the food they cooked were the most favoured features of Forest School, although they remembered many other aspects. This suggests that it is the physical aspects which dominate the children’s memory of experiences. Observation of their use of such features enables us to link this natural feature of the mud holes to imaginative play as pirates in boats at sea as well as tests of bravery in jumping off the mini ‘cliff’ at the edge of the hole. The appeal of food has been noted by other studies (for example, Winsor, Appendix 3H) and links to Maslow’s hierarchy of needs (Maslow, 1970) whereby basic needs for warmth, food and safety etc. supersede others. It is only when these are satisfied that they can begin to move to fulfilling needs for relationships, self-esteem and personal growth.

Two of the children expressed some concern about roughness during Forest School and were keen to emphasise the importance of being kind. This view was echoed by the classteacher who had felt it necessary to intervene on occasion when children looked worried by behaviour that would not usually be allowed in school. There was the time in the rope bus, they were all getting squashed and I thought I can’t watch J. pulling about any more; he’s going to have to come out. Purely because I didn’t feel the other children were enjoying it as much as they could be (classteacher 15.12.04).
This mismatch of behavioural expectations in school and at Forest School was a source of tension for the mainstream staff. Forest School staff were also unsure about who should be responsible for a child with behaviour difficulties. Nevertheless, most of the children said they wished all their class could come to Forest School.

8.4. **Children's drawing**

In one study (Paulin, Appendix 3D), an analysis of children’s drawings (n=34) of forest school showed that natural and generic features were most common:

- People (24)
- Trees (20)
- Grass (12)
- Weather (9)
- Camp (6)
- Tree house (5)
- Rope activity (4)
- Flowers (4).

It is not clear if this preponderance of general features of ‘outside’ is a function of the way the children were asked to draw or if these natural events and features are what impressed themselves most on the children. If children are asked to draw a house they will tend to draw a generic house but if they are asked to draw their house, there will tend to be more detail and personalisation (Goodnow, 1977). In another student’s study (Winsor, Appendix 3H), the children drew mainly fires and food, with less depiction of self-esteem games and sensory awareness activities. If the children are also asked to explain their drawings, this helps interpretation. Sometimes, what children choose to draw is dictated by what they are able to represent by their drawing. For example, when the children were asked before the start of the Forest School programme to draw a picture of what they did when they were playing outside, one little boy asked the researcher to draw him bouncing on the trampoline he had drawn as he ‘couldn’t draw that’, which illustrates one of the problems in accessing very young children’s views. Another striking feature of this initial data collection was that children tended to draw equipment, such as climbing frames or organised games such as football. This may have been a reflection of fewer opportunities for free play in their outdoor play. The subsequent drawings of their favourite thing about Forest School showed a preponderance of the mud holes in which they had spent much of their free time. This echoes their oral recollections. In maps of the orchard used as stimuli to discuss Forest School, the children identified the key elements but most selected areas used for free play as their favourite spots. The children also spoke of ‘not having had time to play’ if they did not have periods of free play during the sessions.

Play really for them is when they are not being directed...they haven’t seen that as part of their free play because they’ve been selected and told what they are doing, whereas when they decide where they want to go in the room, that’s free play to them. (class teacher 15.12.04)

It may be that over-planning of structured activities in Forest School restricts this opportunity. In the same way that some play equipment may prevent more imaginative uses.
but they had great fun splashing around. Children never do feel the weather.
(teaching assistant 15.12.04)

In a circle time held after Forest School, there was a marked contrast between children who had been on Forest School and those who had been left in school with work to do with a teaching assistant. The teacher described it:

I think they saw it (Forest School) as purely playing and a fun thing and that is quite refreshing in a way. A lot of the other children were saying we were doing really hard maths (classteacher, 15 12.04).

This again reinforces the importance of ‘free play’ elements for the children’s enjoyment.

Restrictions on outdoor play were attributed to fears for children’s safety.

People want to keep their eye on children all the time now. Not like when I was a child, you would go off all day on your bike in the forest and all alone. I used to take my children to Phear Park to feed the ducks but not out of your sight to play.
(teaching assistant, 4.10.04)

In another study (Paulin, Appendix 3D), 21 of the children reported playing in the park; 10 did not. Of these 14 went by themselves, six with siblings and eight with parents. This would suggest that some children may be restricted by when parents can accompany their children to play outside and that some families may feel uncomfortable allowing their child to play on their own at the park. In one of the locations, the park is looked over by several houses occupied by military service families and this may have increased the level of unaccompanied play possible.

8.5. Parents’ opinions

Six parents reported that their children played outside for more than five hours per week, but four said they played outside between 1 and 3 hours per week and a further five only played outside between 3 and 5 hours per week (Paulin, Appendix 3D). This means that the majority of children were playing outside less than an hour a day excluding school playtimes. This despite the fact that nine parents reported their child strongly liked outdoor play and the remaining six were thought to like playing outside. All the children had visited woods before and eleven of them had had several or more experiences of visiting the woods. Twelve parents thought that Forest School had helped their child a lot or at least a little.

Parents (n=15) were asked about how boisterous, confident or shy their children were before and after Forest School (Paulin, Appendix 3D). In the majority of cases, the children were perceived to have moved towards becoming more confident. Only two children were deemed boisterous at the start; one had remained boisterous and one had become outgoing (the second point on a 5 point scale from boisterous to shy). Five of the six deemed initially fairly quiet (point 4 on the 5 point scale), were assessed by parents as having become confident (the mid point) after Forest School. Those who were perceived as already confident either stayed the same (5) or became more outgoing (2).

In another study of parents’ opinions (Waite), enjoyment seemed to be the most common and highly valued factor parents perceived in Forest School, (n=8). The following are aims for Forest School derived from the literature that parents and school staff rated according to the degree of benefit they thought their child had received (0 = no benefit to 5 = great benefit).

Emotional/Social
To develop children’s:
- Self confidence
- Self esteem
• Happiness
• Physical skills
• Language skills
• Interpersonal skills

And so to
• Improve children’s behaviour
• Increase their motivation to learn
• Increase their independence

**Cognitive**
• To learn about the natural environment
• To learn to care for the natural environment
• To learn other aspects of the curriculum e.g. maths, science through the natural environment.

**Physical**
• To get fresh air
• To learn practical skills, such as sawing
• To run about and exercise
• To develop physical co-ordination

(Adapted from Maynard, 2003)

Exercise was ranked most highly by parents and school staff as the benefit of Forest School, followed by learning about the environment, learning to care for the environment, fresh air, happiness, practical skills, physical coordination and language which all ranked over 4 on a scale ranging from 0 – 5. Parents found it more difficult to rank emotional and social aspects because they felt these were more difficult to assess or attribute directly to Forest School. The class teacher thought one child in particular may have benefited from the freedom of Forest School:

The one girl, I think perhaps it really boosted her, was so quiet in school; her confidence has really come on and I wondered if the whole being able to speak and be free really helped her. She is doing it in school as well. It may be that in that freer setting, she felt more comfortable with other children. (class teacher 15.12.04)

Overall in this study, school staff felt behaviour had tended to deteriorate rather than improve at Forest School. Although this behaviour change had not transferred into school, the class teacher talked of having to be very firm when leaving the site.

Maybe a way forward for me for the Forest School would be if they supported more of our key things, like when the children first come in (to school), like listening and doing what they’re asked to do are great huge milestones…but maybe it’s that I’m being too high on those expectations, you’d have to look at other teachers and see what they think. (class teacher 15.12.04)

The class teacher had met with the Forest School leader part way through the second programme to establish clearer guidance on roles of both Forest School and school staff within the forest programme; however this remained an issue for both Forest School and mainstream school staff.

**8.6. Interactions**
This section draws on transcripts of meetings with student assistants participating in Forest School where different interactions between Forest School and school staff and the children were noted and a further study (Maciver, Appendix 3C) which looked particularly at the role of the Forest School leader. There appeared sometimes to be a clash of
approaches between the two. The class teacher who had been on two programmes run by different leaders commented that the pace and degree of structure differed but that there were common issues of clarity about the roles and responsibilities of all the adults and expectations of the students.

One study (Puckett, Appendix 3E) lists qualities that promote self-esteem including being flexible, fair, definite, clear, consistent, sincere, kind, respectful and attentive. The Forest School training had highlighted the need for a positive response to behaviour. Mainstream staff, however, imported behavioural expectations and methods of dealing with problems from school. However, monitoring of interactions between children and adults on another study (Waite) suggested that differential support was more dependent upon individual adults rather than the setting from which they came. One Forest School assistant for example was perceived as being more directive than the other. She suggested to the child what the caption for his picture should be, whereas the other assistant worked alongside the child interacting in a more conversational manner (observation notes, week 5).

It is not clear if direct instruction supports self-esteem or not but consistency seems to be important (Puckett, Appendix 3E). This indicates a need for agreement between all adults about the ethos operating in Forest School and how encouraging learning and maintaining certain boundaries to behaviour would be handled by staff.

8.7. Conclusion
From the studies undertaken, it appears that Forest School is a source of great enjoyment for the children. The children strongly valued ‘free play’ and this would seem to be somewhat lacking in their usual outdoor play. Opportunities for outdoor play in itself would seem to be fairly restricted for many children, perhaps because of lack of parental time for supervision and fears for children’s safety. The behavioural deterioration noted in one study (Waite) may indicate that longer involvement is needed to develop self-control of behaviour (Massey, 2002). Greater coordination of behavioural expectations and clearer roles for all the adults would help improve the Forest School experience.

9. Play Project 2
An evaluation of young children’s learning and language skills within the context of Forest School.

9.1. Introduction
Many benefits that have been claimed for Forest School centre on personal and social development (Bridgwater College, 1993; Murray, 2003), but there is less research on how far forest school may support cognitive development (Maynard, 2003). Two of the student projects (Rogers, Appendix 3F; Williams, Appendix 3G) looked especially at how Forest School had developed language and communication skills, but others also touched on language and learning opportunities.

9.2. Previous research
The benefits of Forest School on communication and language development have been reflected in evaluations (Bower et al., 2002; Maynard, 2003; Eastwood & Mitchell, 2003) that have been done thus far, especially in the observations of individual children.

A Forest School pilot project run in Cornwall in 2000 (Bower et al., 2002) brought Forest School and an early years curriculum together by devising activities to meet the six areas of learning (QCA/DfEE, 2000). An analysis of comments from the children’s individual
reports showed that ‘significant progress’ in language and literacy of all the children could be linked to participation in the Forest School programme. The kinds of comments that contributed to the reports were:

- Expressive language has developed and a wider vocabulary is evident
- His skills of communication and interaction greatly improved… and has now started ‘talking’ to other children
- Her language has improved and much of her frustration has gone. She has shown that she is able to communicate and tell you things.
- She is much more confident in her writing. She previously had said, ‘I can’t spell.’
- He is happy to share his findings with others.

Massey (2002) found in her year long study of Forest School in Worcestershire that there were many opportunities for children to work alone, in pairs and as part of a larger group in collaborative projects and routine activities which facilitated their use of familiar language on a regular basis. The opportunities to revisit concepts and extend vocabulary in a real context outside the classroom were also seen to be important. The consensus was that it was not particular teaching methods that inspired the children to become more proficient language users but the ‘relevance’ of the Forest School experience to them as individuals and learners.

Maynard (2003) found that Forest School had a positive impact on children’s language skills in the observations made of the children during the sessions. The children were more confident when talking to adults, their vocabulary developed, they were stimulated by the environment and wanted to talk about their experiences. These impressions were given further credibility when the children’s expressive skills were evaluated. Following the Forest School programme the children were able to describe at greater length familiar situations that were represented pictorially. Although the ‘Children’s expressive language skills had clearly improved’ Maynard (2003, p. 20) warns against assuming a causal link as the same language development might have been seen in ‘normal’ school circumstances.

While an Oxfordshire Early Years Consultant noted that Forest School could support the delivery of the whole curriculum:

*It is about delivering the whole of the curriculum - numeracy, literacy, the works - within a woodland setting. It's not about learning about trees and it's not about learning about recycling and the environment - although that may be part of it. It is essentially about setting the curriculum in another context for all children.*

(Haesaerts, 2001)

the Oxfordshire evaluation concluded that the benefits were wider and included aspects that could not be achieved in school

*It is clear that the project has considerable benefits to offer children, especially in terms of their linguistic and cognitive development and also in the building of social skills and self-esteem. Children benefit in ways that support their full-time education but also in a powerful and peripheral way that cannot be replicated in school.*


**Our Findings**

**9.3. Parents’ opinions**

In one study (Rogers, Appendix 3F) looking at language development, parents were asked before and after the Forest School programme about their child’s language development.
All of the parents said that Forest School had stimulated talk about it at home and in some cases, they had noticed facts being retained and a greater interest in nature.

9.4. Observation

The use of the EEL pupil engagement scale (Pascal & Bertram, 1997) allowed Carole Britton (Appendix 3A) to explore the different sorts of engagement of the children with different activities offered at Forest School. Three children were targeted for particularly close observation and the following set of figures show different patterns of engagement during activities. More detail from EEL observations can be found in Appendix 2.

Level 1 engagement is when there is no apparent involvement by the child, level 2 when their involvement is frequently interrupted, level 3 when there is mainly continuous involvement, level 4 when there is continuous involvement with intense moments and level 5 when there is sustained intense involvement.

In tree cookie making (see Appendix 1 for a description of different activities), the three target children show mostly medium to high levels of engagement of language during the observation as shown in figure 2 above.

In contrast the fire building showed little language use by two of the children as shown in figure 3. This may have been partly because there was a low level of engagement generally by child 3 (in diagonal hash) for that activity, but also because collecting wood could be carried out individually and did not require communication.
Another study (Waite) showed many instances of language development during observations and also instances where concentration levels and engagement were such that learning appeared to be happening. Activities which particularly supported language were those where children were choosing their own activity in contrast with some of the tool use and craft activities in which children were usually silent and concentrating hard.

Some of the observational notes illustrate this.

Craft activities:

‘Concentrates with no words. Good team work’
‘Very quiet, concentrating on task, as soon as done he wants to show the others. Cutting wood he is very concentrated, just back and forth. He takes first slice.’
‘Just looking and watching all the time.’
‘Very quiet working with V with penknife. He concentrates. V comments on how he does things. His lips are pursed.’

Free play:

‘She puts it onto a low tree, always chatting to herself, comes over again to talk to me. ‘Why is this the last Forest School?’ She points out the forming catkins on the hazel and asks about them.’
‘We’re going to build a better one’. S starts making one in the tree. Sa says, ‘can I help you?’ Jo says ‘go in an aeroplane and get the bad guys, that’s cool.’

The low child adult ratios also supported language development. Staff often worked with two or three children and some staff provided a commentary on what the children were doing. However, on occasion this suppressed the amount of child talk. More sustained talk was noticeable when children were playing together without adult intervention or when the conversation was child-initiated.

The class teacher identified many learning opportunities in the activities planned:

Obviously I didn’t see a lesson plan but I could see we did that because it gave them opportunities to think about story telling and structuring stories, beginning, middles and ends, and characters and that, when they made their forest friends and their dens, sort of build up to creating a little story with the props and things. (classteacher, 15.12.04)

Like the scavenging hunt where they had to go and find something that smelt, something that was beautiful and I did a similar thing, we were doing senses, so I did an outdoor thing with the rest of the class. (classteacher, 15.12.04)

She intended to use ideas back in school. She did, however, refer to difficulties with some activities with higher child adult ratios when they were not at Forest School. This links to an issue of dilution of principles of Forest School and the move to ‘kitemark’ Forest School to protect its integrity and standards. This must be set against practical difficulties for schools to afford the costs of Forest School and the pressures of curricular demands on time. Ways to create greater integration with mainstream needs and demands should be explored. Oxfordshire (Eastwood & Mitchell, 2003), for example, has created a programme of mainstream teachers training and being seconded to Forest School so that Forest School may gradually become integral rather than a bolt on to mainstream school provision.

9.5. Conclusion

Clearly Forest School represents a rich alternative learning environment which pupils and staff both recognised. More liaison between Forest School and mainstream prior to programmes would enable more key elements to be linked to curriculum requirements in school. However, it is important to recognised that the free play elements were the most
valued by children and that considerable cognitive and language benefits emerged from interactions with no adult agenda.

10. An overview of the contribution of Forest School through mapping of forest school activities against the six areas of learning (QCA/DfEE, 2000)

10.1. Personal, social and emotional development

- Disposition and attitudes – children appeared to enjoy the experience and have positive attitudes during forest school.
- Self confidence and self esteem – although it is impossible to attribute causality, children with low self confidence or self esteem seemed to develop higher self esteem and more confidence.
- Making relationships – children commented about making new friends at forest school as they sometimes worked in different groups than in school. The class teacher in one study also commented that her relationship with the children had been strengthened by the experience.
- Behaviour and self control – some concerns were expressed by mainstream staff and two children that the expectations of conforming to set agenda differed at Forest School. The short 6 week programme may not be sufficient to enable self discipline to moderate behaviour. Conversely, in another case, the freer approach appeared to have increased an individual’s self confidence.
- Self care – children were given opportunities to take risks under carefully controlled conditions. This was summed up by a teaching assistant. Well it was fascinating for me to see how the children reacted to the mud and rain, or when we were freezing, they were, can we take our coats off? I just find it fascinating how they loved sawing wood, when I thought oh my goodness they’re not giving those children saws or penknives, but I think it’s great to give children something like that and they managed it – with supervision of course. (teaching assistant 15.12.04)
- Sense of community – This was particularly marked where the children could simply walk to forest school as it was less of a bubble existing outside of normal school compared to their experience in travelling by taxi to it (the children talked about it being in their village and were keen to develop their own grounds with some of the things they had enjoyed). The mapping of their use of the space showed how they gradually increased their coverage of the area. They also showed another sense of community through their wish that the whole class could come to Forest School (circle time 8.12.04).

10.2. Communication, language and literacy

- Language for communication – There were many opportunities for communication. Children freely expressed their wishes, likes and dislikes, for example, ‘Others resist his control. ‘We don’t need to Sa.’ But acknowledge his leadership by asking ‘can I go first Sa?’’ (observation notes, week 4).
- Language for thinking – There were many instances where the children vocalised internal thinking, for example, ‘Very careful use of scissors to trim the hair. ‘I’m going to have all this hair. Can you hold it please?’ He puts it in tree, singing.’ (observation notes, week 2)’A says ‘every time we come here
we can go and see it'. Talk about the stream. ‘It sounds like little splashes’.
(observation notes, week 5)

• Linking sounds and letters – The Name game provided a regular opportunity
to link letters and sounds as children thought of an animal beginning with the
same letter as their name. This was not perhaps developed as much as it
could be. The children also spontaneously practised sounds like rhyming, 'S
guesses names for J forest friend -J yummy, no, jummy, no, bummy, no.
Mrs Bo Peep!' (observation notes, week 2)

• Reading – Storytime was popular with the children and modelled reading.
Children sometimes joined in chanting where the story repeated lines.
• Writing – Children had the opportunity to create a story from natural objects
used to create forest friend dens. This was most effective when the adult
was able to support the children’s imagination but clearer guidelines and
more time could perhaps have helped to develop this activity.
• Handwriting – Some children used mud to write their name, encouraging
freer mark making.

10.3. Mathematical development

• Numbers as labels and for counting – Some of the songs and organising
activities sometimes used numbers
  ‘Sa ‘Count up how many’ so can know how many bits of wood and clay
  needed (observation notes, Week 4), but one of the class teachers also talked about perhaps using the number of
  steps in map making.
• Calculating – There were opportunities to do calculations for practical
  problem solving, for example with the food and drink, but these were not fully
  exploited.
• Shape, space and measures – Many opportunities existed within the
  activities but again these were not drawn out.

10.4. Knowledge and understanding of the world

• Exploration and investigation – The children were very actively exploring the
area and natural features. They carried out their own investigations, for
example, floating leaves and sticks down the stream to see what would float
furthest and speculating where they would go.
• Designing and making skills - Choosing appropriate materials for den
  building, for example.
• Information and communication technology – A digital recorder was used by
  Forest School staff to evaluate sessions after the children had gone and
  photos and some videos were taken of activities. However, more use could
  probably be made of such tools, for example children could speak stories
  about their forest friends onto tape. Photos or videos could also be used
  back in school to stimulate creative work.
• A sense of time – Children showed a keen sense of time in that on the first
  session they asked when break time was at around the time they would
  normally have it! A teaching assistant also made the point that ongoing
  Forest School would enable children to become very aware of the seasons.
• A sense of place – Each session children led each other around to the main
  features of the site. After Forest School, most of the children were able to
  identify key points on a map of the site. Weekly mapping of the use of the
site for the research also showed how they gradually extended their exploration.

- Cultures and beliefs – The exposure to an alternative form of education extended the children’s experience. They also had opportunities to express beliefs and values, for example about where the stream might go, what they liked or didn’t like about others’ behaviour. This expression of their views could have been more explicitly valued. It depended on different adults whether children’s comments were acknowledged, developed or acted upon.

10.5. Physical development

- Movement – The children were very active and practiced jumping and climbing. ‘Free play. Others jump in mud holes; S in school clothes stands aside.’ (observation notes, week 4)
- A sense of space – They became more aware of their own body through activities like the blindfold game where they had to judge what spaces they and others can get through safely. ‘On the way back, he doesn’t tell him there is a step and J falls.’ (Observation notes, week 5)
- Health and bodily awareness – A parent reported that even when her child had breathing problems, she had insisted on attending Forest School. Mainstream staff and parents suggested fresh air was one of the main benefits for the children. Sawing and whittling required awareness of their body for safety.
- Using tools and materials – Children used bow saws and penknives to cut and whittle wood. They also assisted in building the fire and lighting the storm kettle for hot drinks. They had many opportunities to use a variety of materials to make forest friends, dens and crowns. ‘Asks me for leaf for a feather, trims it to size. Clear idea of effect he wants.’ (observation notes, week 2)

10.6. Creative development

- Exploring media and materials – The activities described above gave children the chance to use materials but they were also investigating their environment independently for example,
  ‘A plays with a log on her own, frowning deeply. The feel of it begins to interest her and she begins to peel off the bark. She rubs it on her forehead to feel the smoothness where she has peeled compared to the rough bark.’ (observation notes, week 6)
- Music – Most sessions included a few songs which most of the children seemed to enjoy.
- Imagination – The free play sessions, forest friends and making their dens seemed to offer many opportunities for imaginative play.
  ‘Does rhythmic movements for his Indian. Imaginative play.’ (observation notes, week 2)
  ‘J picks up stick as a wand.’ (observation notes, week 6)
- Responding to experiences and expressing and communicating ideas – The children often commented about aspects and their physical response to the sludgy mud was clear. Their oral expression developed for example in the blindfold game, where at first they tended to lead their partner without words but began to use instructions such as ‘duck’ after a while. They also tended to develop imaginative play through conversations.
‘S is very serious, poking with sticks and making a sawing motion. He is trying to fix sticks in. ‘Sa this could be our fireplace and our chopping place.’ (observation notes, week 4)

11. Conclusions and Recommendations

(Action points identified by Devon EYDCP (zero14plus) are in italics)

11.1. The enjoyment of the children at Forest School and the myriad opportunities for rich experiential learning are manifest in all the studies. In the context of the government’s initiative for ‘Excellence and Enjoyment: a strategy for primary schools’ (DfES, 2003), Forest School clearly represents a means to inject enjoyment into learning. It also fulfils the requirement for outdoor play in the Curriculum Guidance for the Foundation Stage. The uniqueness of each programme in terms of children, leader and site makes ongoing critical self-evaluation involving mainstream and Forest School personnel crucial. The toolkit (Murray, 2003) which is currently under development may offer guidance for this in the future. Our recommendation to involve both mainstream and Forest School staff in planning and evaluation of Forest School would also help to answer this point.

11.2. From our research and that of others’ (Massey, 2002; Murray, 2003; Maynard, 2003), it would appear that sustainability of the benefits of Forest School would be improved by more extended and integrated experiences. Ways therefore need to be explored to make Forest School more integral to mainstream practice and to reduce the cost to schools with already hard pressed budgets. Oxfordshire’s model of seconding mainstream teachers for training may offer some possible future direction. Where budgets remain limited, greater clarity about criteria for selection of those who would derive maximum benefit would help. From our research in the early years, those lacking confidence seemed to derive the most benefit. Surveys of mainstream schools and other early years settings would enable development of awareness of different forms of and needs related to outdoor learning provision and expand the scope of the research to settings other than schools (Philippa Woods, consultation response, 21st January 2005). Case studies of exemplary practice identified by these surveys and through consultation with Foundation Stage Advisory teachers will enable a planned approach to a range of sustainable models.

11.3. Schools need to identify the particular benefits that education outdoors can bring. The surveys outlined above would provide a forum for this. Settings may wish to carry out a mapping audit of how their current outdoor space is used by children to build this into their development of outdoor play opportunities in their site and consult with Forest School leaders. Consultation with Forest School leaders such as Forest Inspirations and providers of training such as Bicton College and Bridgwater College would inform such planning and help to identify existing and suitable sites for Forest School.

11.4. Forest School pedagogical principles and requirements in terms of adult intervention, learning intentions for activities and environmental contexts need further clarification. A research project to identify trained Forest School leaders in Devon and to explore the principles of Forest School with them would clarify these points. It would provide comparative data to examine Forest School’s relationship to mainstream practice and provide scope for development of outdoor pedagogy.
11.5. **A balance is needed between free play and structured activities to ensure that child led opportunities exist.** *This would also be explored by the above action point.*

11.6. **The school's key expectations of children’s behaviour and learning need to be made explicit to Forest School leaders and the establishment of boundaries, roles and responsibilities made clear to all.** *A critical perspective to planning and evaluation, including both mainstream and Forest School staff, would ensure better sharing of aims and expectations so these can also be clearly and consistently signalled to children.* A planned preparation process before Forest School might help with this (Helen Thoms, consultation response, 27 January 2005)

11.7. The full report has been copied to our funding partners. *Further dissemination of the report will be carried out by Ana Simons from Devon EYDCP (zero14plus) including Foundation Stage Coordinators and Foundation Stage Advisory Teachers as appropriate.*

12. **Dissemination and consultation**

12.1 The growing network of partners interested in the development of Forest School in Devon is one source of dissemination but a further major part of the dissemination of these projects has been through a pilot period of website development for a training ‘helpline’ on Play with the particular focus on forest school. This is situated within the Devon Zero-14 Plus ‘Play Club’ section of the existing Partnership website ([http://latis.ex.ac.uk/forums/zero14plus/viewforum.php?f=7](http://latis.ex.ac.uk/forums/zero14plus/viewforum.php?f=7)). Students have written about their experiences for the website and photos of the sessions have been posted to enliven discussion. Edited students’ assignments have been placed on the website. Leaflets have been distributed by the training manager, Ana Simons, through Play Cluster groups throughout Devon to advertise the Forest School material on the Play Club. It is intended that this targeted focus will stimulate greater use of the site.

12.2 The research in progress on Forest School was disseminated at the Devon EYDCP (zero14plus) conference ‘0-3 Relationship Matters: Personal, Parental and Professional’ at the Buckfast conference centre in March (2004) and a workshop and display was featured at a conference ‘Foundation Stage Partner Colleges: Challenges for Young Children’ on 29 April, 2004 on the Exmouth campus and at the Wood Fairs held in 2003 and 2004 at Roadford Lake. A workshop session on Forest School was run jointly by Forest Inspirations and Bicton College at Devon EYDCP (zero14plus) Play conference ‘Getting Serious about Play in Devon’ in October 2004. Students presented their findings at an Early Childhood Studies Research Dissemination day in May. We are also intending to offer a session for the Devon Early Education Forum later in 2005. We are presenting our findings at a meeting of the Play Strategy group of Devon EYDCP (zero14plus) on 24 January 2005. We have attended conference sessions on outdoor education research by the National Foundation for Educational Research. We intend to publish the results of our research in an academic and practitioner journal. We are currently developing further bids for research projects with EYDCP (zero14plus) and with our colleague, Dr Ulrike Gelder, an application to the Economic and Social Research Council for further research into education in the outdoors.

12.3 **Consultation**

A consultative draft of the report was sent to the following individuals on 12th January 2005 inviting further dissemination and comment by 1st February 2005.
Carole Britton (former Early Childhood Studies student)
Alan Dyer (Earthwise & Principal Lecturer, University of Plymouth)
Early Childhood Studies Team (University of Plymouth)
Jenny Doyle (Worchester Forest School, Bishopspwood)
Shayne Kelly (Steiner Waldorf student, University of Plymouth)
Louise Kennedy (Forest School Training, Bicton College)
Tracey Maclver (former Early Childhood Studies student)
Sam Massey (Worcester Forest School)
Trisha Maynard (Senior Lecturer, University of Wales, Swansea)
Rowena Morrish (Teacher)
Richard Murray (New Economics Foundation)
Liz O’Brien (Forest Research)
Niki Paulin (former Education Studies student)
Susannah Podmore (Forest Education Initiative)
Sarah Rogers (Early Childhood Studies student)
Simon & Marijke Shakespeare (Forest leaders, Forest Inspirations)
Ana Simons (Play Strategy Manager, Devon EYDCP (zero14plus))
Kris Tutton (Oxford Forest School, Oxfordshire County Council)
Jim White (Devon Cluster Group, FEI)
Julie Winsor (former Early Childhood Studies student)
Gordon Woodall (Somerset Forest School)

We would like to thank all those who responded. Their comments have been incorporated where possible in producing this final report. Hard copies were circulated to funding partners on 18th February 2005 for further dissemination. Electronic copies are available on request from sjwaite@plymouth.ac.uk or bdavis@plymouth.ac.uk.

In kind support
The true cost of the research has been subsidised by the University of Plymouth students acting as volunteer assistants on the programmes (c. £1632) and school staff accompanying children (c. £1200 for supply cover).
References


Bridgwater Forest Schools www.bridgwater.ac.uk/forestschool/earlyyears.asp [accessed 06-11-04].


Forest Inspirations http://www.forestinspirations.org.uk


OFSTED http://www.ofsted.gov.uk/


### Appendix 1

#### Forest School Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
<th>Benefit of Activity</th>
<th>Mainstream teacher adaptations</th>
</tr>
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<tbody>
<tr>
<td>Name game</td>
<td>The simple version – each child says their name and an animal beginning with the same first letter as the first letter of their name.</td>
<td>To ensure that every child has the opportunity to know all the other children’s names. Also gives the staff chance to remember names. It is often easier to remember the animal than the name of the child.</td>
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<tr>
<td>Boundary walks</td>
<td>Children are taken around the site and various areas are pointed out, including no go areas and why they are out of bounds. Can be done in the rope bus, visiting areas in the site and naming them.</td>
<td>To get the children used to the site they are in. Provides a sense of security within which there is freedom to play and explore. When this is done as a rope bus, the children get a chance to lead the rest of the group to an area on site they want to visit.</td>
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<tr>
<td>Forest friends</td>
<td>The first step is to measure a hand’s span and saw off a piece of hazel to that measurement. Then using a penknife whittle away some of the bark to create a face area for the Forest Friend. Finally draw on facial features and decorate (hair, clothes etc).</td>
<td>Measuring – using the body as a measurement. Simple tool work. Practicing sawing (gross motor skill) and introduction to whittling (fine motor skill). Creative task making a toy to play with at Forest School.</td>
<td>Made out of logs, could use fabrics etc. Story writing, letters, messages, PSHE</td>
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<tr>
<td>Scavenger hunt</td>
<td>Children are either given a whole list of things to go and find or they are given each item one by one. Children then go off and find the things listed (many are to do with texture, sound and what they like about the item).</td>
<td>Getting the children to explore a site and really looking for things in detail. Thinking about textures and sounds. Being able to remember it all and share with others at the end. Found items can be used for a follow on activity such as Crowns, collages.</td>
<td>Find something that smells, makes a sound, is rough/smooth, is beautiful, is new/old, is food etc. - links to senses, science, music. Recording, write a list, draw, make a collage.</td>
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<tr>
<td>Tree cookie making</td>
<td>Using the saw to cut a slice of wood. Children work in pairs. They can decorate their slice.</td>
<td>Simple tool and working in pairs activity. Need to work together to be able to saw well.</td>
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<tr>
<td>Crown making</td>
<td>Children use the scavenged materials</td>
<td>Introduction to creative activity using natural items found in the</td>
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<tr>
<td>Activity</td>
<td>Description</td>
<td>Benefits</td>
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<tr>
<td><strong>Smelly potions</strong></td>
<td>Gathering different materials for their smells. Can make up a name for the potion and share it with others.</td>
<td>Each child is given a cup with a little water in it. They find a small stick to use as a stirrer and then collect various leaves, soil and anything else they wish, adding it to the water and stirring it each time. They then smell their creation. Each added ingredient will change the smell. Instruction writing, language development</td>
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<tr>
<td><strong>Listening game</strong></td>
<td>Children sit quietly for around 1 minute and listen to all the sounds they can hear around them. They mentally count the various sounds and share them with the rest of the group at the end.</td>
<td>Taking the time to listen to all the sounds around. To share with others what they have heard (taking it in turns).</td>
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<tr>
<td><strong>Sherpa walk – rope bus</strong></td>
<td>Children are either in a folded double rope or just holding on to the rope, with one child leading the rest of the group. Can be used as boundary walk.</td>
<td>Having a chance to lead the rest of the group and being aware of others. Choosing where to go. A safe way to investigate the boundary. This could work in school with clearer expectations and more adult support and intervention. Geography – knowing school site, finding something, using maps, making their own maps. Maths – distance/length/time etc., counting steps.</td>
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<tr>
<td><strong>Frame making</strong></td>
<td>Children measure and saw 4 hazel pieces to the length of their arms. They then use square lashing to tie the 4 pieces together and create a frame. This can be used to frame a collage, or to hang in a place in the woods to frame a particularly beautiful thing.</td>
<td>Measuring, using the body. Sawing. Learning rope work (square lashing). Choosing something beautiful to frame.</td>
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<tr>
<td><strong>Den making</strong></td>
<td>Children find materials to make dens with (normally mini dens for the Forest Friends) and create a den.</td>
<td>Working with others. Designing a den and making it. Being creative and playful. Link to home buildings topic. Build dens for forest school people, animals, each other. Notice changes in season, decay</td>
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<td><strong>Safari</strong></td>
<td>Like the Sherpa walk and rope bus, with the added activity of looking for hidden things throughout the site. The hidden</td>
<td>Encourage children to look at different levels within a site. Leading others. Use map to find things. Children make their own treasure.</td>
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<tr>
<td>Activity</td>
<td>Description</td>
<td>Benefits</td>
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<tr>
<td>Feely bags</td>
<td>There are various different textures contained in separate bags. Children put their hand in and feel, trying to guess what it is they are feeling.</td>
<td>Heightening the senses, broadening scope of vocabulary and fun.</td>
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<td>Blindfold game</td>
<td>In pairs children take turns to lead their blindfolded partner to a tree so they can feel it. They then have to try and guess which one it is.</td>
<td>Partner is supposed to talk to guide. Develop trust, communication and senses.</td>
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<td>Fire building</td>
<td>Children gather various sizes of dry wood and build up a fire for lighting and cooking on.</td>
<td>Learning about comparative size. Understanding the difference between dry and wet wood. Learning about fire safety and demystifying fire. Building confidence.</td>
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<td>Cooking on fire</td>
<td>Various food items are cooked in a number of creative fashions.</td>
<td>Deepening the understanding of fire. An opportunity to have a go at cooking – learning basic skills. Enjoying a social activity with the group.</td>
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Appendix 2

Figures showing levels of engagement in different activities for 3 target children

Den making - Session 1

Crown making - Session 3
Tree cookie making - Session 4

Framed pictures - Session 5
Fire building - Session 6

Figures showing engagement of three target children over 6 weeks of programme

Child 1 engagement over 6 week programme
Child 2 engagement over six week programme

Child 3 engagement over six week programme
Figures showing the different patterns of engagement during different activities for each child.

Child 1 engagement over 6 activities

Child 2 engagement over 6 activities
Child 3 engagement over 6 activities

- Concentration
- Energy
- Complexity/creativity
- Facial expression
- Persistence
- Precision
- Reaction time
- Language
- Satisfaction

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<th>Complexity/creativity</th>
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Appendix 3

These are edited highlights from students’ research projects which give a flavour of the rich diversity of perspectives gained from this research.


My interest in Forest School projects was manifested while attending university. It seemed to connect my thinking on how children learn and my experiences previously gained while working closely with children and their families within Pre-school and Primary settings and also, having brought up two children of my own who had different preferred learning styles.

I believe my experiences as a Forest School assistant have given me insight into some aspects of how children develop and learn at designated stages. My interest was also aroused when working in a primary school setting with Special Educational Needs children and I realised some were unable to sit at a desk and learn. It seems that some children have different preferred learning styles with some being kinaesthetic learners (learning by doing).

Forest School very much supports children who need to learn in a different way and often need help at building self-esteem, social skills and independence. Forest School focuses on personal development, identifying individual learning styles and giving children opportunities to learn and achieve. They achieve this by doing hands-on activities that are using natural materials. The activities are small manageable tasks that set children up to succeed. These are designed to boost confidence within each individual child. To cater for different learning styles, instructions are given verbally, visually and practical demonstration.

The group of children who came on the Forest School project consisted of 12 year 1 children, aged 5/6 years. The children were chosen on a first come, first serve basis as the whole class were given the opportunity to be part of this project. The children were not picked because they had low self-esteem or low social skills.

The Forest School programme ran for 5 Tuesday mornings and one Wednesday morning from 10am-12 noon. The programme ran over a 5-week period that added up to 12 hours of contact time with the children. Unfortunately, I was unable to meet with the children before the programme started and therefore I had no prior knowledge of the children’s academic or social abilities or any background information. This, I felt, was a great disadvantage as it took the first and second session to get to know the children a little before I could begin to gather material for the study.

What I wanted to find out was: How does Forest School promote opportunities for learning?

I can say that Forest School did provide opportunities for learning by giving the children time and space as well as new experiences. The children experienced activities such as:

- Making things with natural materials
- Using real tools
- Playing games with teambuilding in mind
- Free play in the woods
- Fire building and lighting
- Cooking on an open fire

However, it was much more difficult to define what ‘learning’ was and how this might take place. By using the Effective Early Learning (EEL) scale it helped me to understand how children’s learning can develop through play. It appears that when children play they are learning faster and deeper than at any other time. Also, those children learn most effectively through meaningful first-hand experiences that help them to consolidate their understanding of themselves and their world around them.

I believe Forest School provides play and first hand experiences where children are highly involved. Therefore through this small scale study I am trying to discover is Forest School gives children ‘opportunities for learning’.
Methods

My aim was to find out how Forest School promotes opportunities for children to learn in an outdoor natural environment. The ways I chose of collecting data included a face to face mini questionnaire with the participant children, a daily diary of the Forest School sessions, session evaluations by the Forest School leader and the assistants, a semi structured interview with the class teacher and children’s drawings. I also used observations to write a case study of one child. The messiness of research was revealed to me when I found that my best-planned intentions were met with many unforeseen obstacles to do with access and timing. Ideally I sought to combine my role as a Forest School assistant with my research needs, however in practice this proved to be extremely difficult. The children’s excitement at going to the woods, for example, did not provide the best circumstances for my face-to-face questionnaire and the demands on the class teacher’s time meant that I could only have a brief interview with her. The following points show some of my thinking and how I met the challenges the research presented:

• The face-to-face questionnaire had to be done on the first session, as I did not want the woods experience to influence their answers. This in practice was very difficult as the children were excited and did not want to sit down and answer questions. Although not ideal, I managed to get the information required by walking with the children while they did activities in the woods. The questions were designed to establish how much ‘outdoor play’ or ‘outdoor activities’ the children were already doing.

• I did a case study on one child to shed some light on how a child’s learning outdoors takes place. I used the Effective Early Learning ‘involvement scale’ to determine their levels of concentration and use of language. This took the form of two-minute observations while the children were doing Forest School activities.

• I kept an in-depth daily diary of events and happenings that I wrote up after each session.

• A method of gathering information from the forest school session was the pooled and shared information recorded by Dictaphone within a short period after the children had gone back to school while still on site and before we cleared up. We sat and talked about all aspects of the session and each child individually. This was then taken home and typed up by the Forest School leader and distributed to the assistants.

• At the end of the Forest School programme I did a semi-structured interview with the class teacher. This was helpful as I was able to clarify my thoughts and findings on certain children about their character, ability and family background.

• I asked the children to draw a picture or write if they preferred to give their impressions of Forest School.

Discussion and Analysis

One of the Forest School’s aims is to boost confidence and self-esteem through setting the child up to succeed. This is done by breaking down set tasks into small, achievable chunks that are matched to the child’s capability. Also activities, as far as possible, are initiated and child led. For example, the children took the lead in establishing the physical boundary of the woods. As a group we walked and talked about the natural boundary edges and slopes and fencing. There was an area where the public had been tipping rubbish and we discussed the danger of going near this part. This gave the children responsibility and respect for rules and to consider what others were doing to our environment. Once these boundaries were discussed and established by the children and adults, the children felt comfortable and secure within that area.

While attending Forest School the children were able to experience new physical activities such as using saws and drills. Also, collecting wood of a certain size and using fine and gross motor skills. When using tools and doing activities most instructions were given verbally, visually and by using practical demonstrations in order to cater for all different learning styles. The children were not given any writing materials or writing activities to do in the woods, everything was practical, using the body and mind to experience, think and become aware of what was happening around them.
Forest School aims to give children new experiences that they are unable to receive in the classroom situation. For example, 1) lighting the storm kettle to produce hot water for drinks, 2) sitting on ‘sit upon’ in the shelter, 3) finding natural materials in the setting to make and create picture frames, necklaces and forest friends out of wood, 4) using senses for exploration and awareness of size, shape, smell and touch, 5) seeing how properties of materials change by hearing them, e.g. marshmallows and popcorn.

I believe Forest School has given the children opportunities to stretch their own individual knowledge, thinking and cognitive actions within the activity they experience.

**Conclusion**

My research on Forest School has given me further insight into how advantageous this type of project can be for children’s learning. It appeared that most children do like being outside and doing activities but not all children, according to my questionnaire, had been able to experience that.

With the use of the EEL ‘child involvement scale’ I tried to find out what kind of learning takes place in the Forest School. This proved very interesting and although it suggested that there were times when the children were highly involved, there was no definite evidence of what learning took place.

When reviewing the result from this small scale study it must be remembered that this involved a very small sample over a short period. Also, it was hard to determine what learning took place during the Forest School activities. The collected data does indicate that Forest School did promote opportunities for learning but it might also be asked whether children might also develop their learning through other outdoor activities.

One of the real benefits of Forest School, I believe, is getting the children outside in the fresh air, having a good time and enjoying themselves. If the children did nothing more than being outside, it would still be beneficial. It is broadly accepted in early childhood education that children learn best through free play and discovery. Child’s play is usually pleasurable, self-motivated, imaginative, spontaneous and active. Quality play and activity involves the whole child using gross and fine motor skills, their senses, emotions, intellect and social interaction with others. I believe that these play attributes were a prominent part of the Forest School programme. It appears that Forest School has given this group of children the opportunity to develop their learning. It has given the children opportunities to experience new activities in an environment that is different from the classroom situation. The following quote from a parent gives some indication of the impact Forest School has had on one child:

*It has given him more confidence. He has had a lot of experience through Forest School that he has never had before, such as cooking marshmallows on the sticks over the open fire, etc. He likes doing new things and keeping his brain active and you have certainly done that. Keep up the good work.*

**B. Shayne Kelly, 2nd year Steiner student, reports on her forest school experience.**

My time as a volunteer with Forest Inspirations has been greatly beneficial. A lot of trust between children and adults has been formed over the 8 weeks and with this has arisen a sense of belonging. The children have loved being in the woods. It appears to have re-awakened their connection with nature, strengthened their confidence with one another and the environment. They have built dens, helped construct an obstacle course, whittled guardians and helped tend the fire, etc. This has all been seen as meaningful work which has given the children not only confidence, previously stated, but joy from being useful and wanted.

Teaching children to manipulate tools and materials is in itself a skill that transcends time and also promotes manual dexterity, co-ordination and self-control. New research is showing that working with the hands is actually seen to indirectly stimulate the intellect. Through observation I have also seen how it can be more beneficial to not stick rigidly to the structured timetable, how it can sometimes prove more useful to stay with a particular task, allowing the children to become more submerged with what they are doing. When this happened a deeper level of understanding appeared to make itself known to the children. I also found the method of bringing literacy into the session to be very creative. The children hunted for words hidden within the woods, tied to trees. When found they incorporated them into a tall story they were devising, which they then read out to the rest of the group. It made the whole writing experience a fun, life-filled activity, rather than a cold, abstract exercise. The whole atmosphere and environment was very supportive towards the children’s needs and their different levels of learning capabilities. It was a very relaxed, non-pressured atmosphere where the children were heard and any ideas they brought to the group were followed where ever possible, such as one child who came up with the idea of making a snake out of hazel. This idea was incorporated into one of the session’s activities. Although my role tended to be more towards observation,
as Forest Leader and Assistant Leader were the ones with the most hands on experience, I still learnt considerably from the observation and found the whole experience very worthwhile while for myself and greatly for the children it is set up for. I think to incorporate this into the national curriculum would be a very worthwhile thing to do.

C. Tracey Maciver in her 3rd year independent study module entitled: Forest School—An Exploration of Roles looks at the forest school leader’s actions and how they might promote self control and learning.

Due to unforeseen circumstances I was unable to follow my initial research plans to observe the interactions between the adults involved in the Forest School programme, so I adapted my focus to watch what the leader was doing. As a result I feel that I have gained a greater insight into some of the qualities that are desirable in a Forest School leader, some of the problems that can be encountered and some of the ways to counteract them.

Apart from the obvious safety issues surrounding Forest School is it important for the adults who run a group to be specialist trained when caring for young children? According to research done by Arnett (1989) who observed the behaviour of 159 child carers in Bermuda with four different levels of specialist education ranging from no training to extensive training, the results suggest that carers with extensive training showed more warmth and were less punitive and detached in their interactions with children than carers in the other three groups. Carers with mid-range training in child development were more positive and less punitive and detached than carers with no training. This suggests that some specialised education is good for the quality of teachers’ interactions with children but that more is even better.

An agreement was made during the training session that we, as assistants would adopt a wholly positive approach to the children during the Forest School sessions. We would always treat the children with respect. We would not be ‘teachers’ but ‘facilitators’, we would not actively seek to teach the children in a classroom sense but we would offer them support, praise and freedom within a safe environment which would enable them to use their innate curiosity to explore and learn in their own way. The leader, asked us to only speak to the children with positive words and if a child showed undesirable behaviours we were to verbally reason with them in a positive way to find a more appropriate response to the situation and help the child to decide if their behaviour is acceptable to others in the group rather than the adults taking control and saying ‘No’ or ‘Don’t do that’. He emphasised that the concept of Forest School is to take children out of the classroom, which is often a place where some children can see themselves as failures, into a new environment where they can see themselves in a new light. The purpose is to demonstrate to the children that skills that do not involve paper and pencils are valuable.

At each session there was a semi-structured programme of activities devised by the Forest School Leader and based on his previous Forest School work, which tended to be with children of an older age range. I was impressed how he interacted with the children and I found the large amounts of positive interactions with them refreshing. As an experienced early years worker I have been frequently frustrated by ‘teaching’ methods that take place in early years settings and feel that ‘facilitating’ is more appropriate. The Forest School leader demonstrated a flexible approach to the programme. In one session when we were going to make popcorn over an open fire as an activity there were a few children who were being very disruptive and excitable making this activity inappropriate to the children’s mood, so it was decided to postpone that session until another day. Instead we changed the programme to include more physical activity and games.

At each session the children enjoyed a range of activities, however some of the activities were not really appropriate for the age of the children. For example, I felt that blindfolding the children and getting them to hold a piece of rope for a walk through the woods might be frightening for some of the four year olds. Simon was happy to accept my suggestion for a similar activity that was designed for young children. On another occasion then we were making forest guardians (small wooden figures), some of the children were finding it difficult and tiring to saw all the way through the wood and some complained that it made their arms ache. A few sessions later when were set to make tree cookies (decorated slices of wood), I was impressed that Simon had taken on board the difficulties that some of the children had displayed and had partially sawn a log with enough grooves for each child so that the children could complete the saw cuts and make their cookies. This assisted the children by setting them up to succeed in a task that some of them would have found difficult.

I feel that the leader showed good leadership skills. He used each session to learn more about the abilities and needs of the children and responded to his findings. He also admitted to a lack of experience of working...
with young children and was happy to respond to suggestions made by others. He did not assert authority over the children but seemed a charismatic authority to lead them and on most occasions they followed and complied with what he was doing.

Children are affected by many factors and whilst involved adults cannot control every external influence on young children, they can control their own styles of interactions when working with them. I feel that when observing the type of interactions between the Forest School leader and the children that he displayed a cross between the permissive and authoritative leadership styles as identified by Baumrind (1967), allowing a lot of freedom with limited control but showing a lot of warmth, fairness, reasoning, support and encouragement to achieve objectives (Schaffer, 1996). I also feel that his sex and gender could also have affected the way that the children interacted with him. From past experience I have found that young children like the presence of male workers within early years settings. I do not know why this is but it does seem to have positive effects on children’s behaviour.

From my observations for the Forest School leader, I feel that qualities that have helped to make the Forest School sessions successful were enthusiasm, calmness, kindness and a genuine interest in what the children were doing. By bringing a flexible approach and open-mindedness to the programme, letting the children and circumstance lead the way rather than sticking to a programme of lesson plans and learning outcomes I feel that the Forest School was a positive learning experience for all involved. As a consequence, I am now enthusiastic to embark upon the Forest School leadership programme.

D. Niki Paulin in her 3rd year research in Education Studies entitled: Forest school: What are the benefits? discusses parental and children’s views of forest school.

The study aimed to investigate any tangible benefits that Forest School can provide for children. The main features of forest school are set out below.

1. **It is outdoors.** Many have agreed that being outdoors provides a unique learning experience in itself (Appleby, 1998; Wilson, 1994), as well as aiding intrinsic motivation and innate curiosity (Ingram, 2000; Wilson, 1994; Hufton e. al., 2002; Caine & Caine, 1994 in Roberts, 2002), which could be linked to environmental education and responsibility (Wallis, 1994). It is felt that probably now more than ever before our children need outdoor experiences. Indeed, Karsten (2003) cited in her study that the dominance of cars and other social dangers were putting daily constraints on children’s freedom of movement (Ouvry, 2000).

2. **It is physical.** Maude (2001) saw growth and physical development as the two processes that determined movement development, which underpin all other areas of learning. If outdoor play was restricted, it was not just physical health that suffered. She felt that children needed the opportunity to let off steam or develop physically, in order for them not to be perceived as ‘naughty’ or ‘hyperactive’. Many problems experienced by today’s children are considered to probably be the result of the lifestyles imposed upon them by adults. Physical children and kinaesthetic learners, especially boys (Biddulph, 1994; Ouvry, 2000; Bilton, 1998) seem to learn more happily and effectively outdoors, where these behaviour issues seem to diminish. Forest School literature emphasised matching activities to individual learning styles, recognising that kinaesthetic learners were particularly suited to learning in the outdoor environment (Bridgwater College, 2003) and that by breaking the tasks down into small chunks, children could succeed and achieve (Roberts, 2002), thus building up confidence and self-esteem.

3. **It is undertaken in a group.** The happy environment and attitudes of the adults and children help create a sense of belonging and acceptance within the group, which Griffiths (1993 in Chetcuti and Griffiths, 2002) argued creates self-identity and esteem. Of course, it was not advocating a restrictive or ‘too safe’ environment with these low child-adult ratios (Walsh 1993 in Stevenson, 2003), but rather the opportunity to extend their skills and allow a more child-led experience. Low child-adult ratios and the small groups found in Forest Schools contribute to the development of this group identity and provide a supportive environment for children to develop skills and express themselves.

**Methods**

After a training day for the adult assistants (myself included), it became obvious that obtaining research data at the same time as assisting with the programme was going to be problematic. Therefore methods were considered that could be written up later, as well as ones that would provide triangulation and support one another. Participant observations gave access to what was actually taking place in the sessions and facilitated a closer examination of the child’s reactions first-hand, including details which might otherwise have been missed (such as facial expressions and body language). The observations undertaken were unstructured, as although scales and sheets were initially used to focus my attention, a naturalistic approach
was used to take down as much as possible in order to decide later its significance; letting the ‘elements of the situation speak for themselves’ (Cohen, et. al., 2000). The observations were made on one target child with general comments about the group, the activities and the day. The research question opened up very wide areas for discussion. For this reason one child in particular was the main focus of observations in order to gain a more detailed insight into his reactions as the programme progressed. The child was chosen following an upsetting occurrence in the first session. His experience of the six-week Forest School programme was then noted, and also used to provide supportive evidence for the other data collected.

The second method used was a questionnaire for the parents. The intention was to gain the thoughts of parents so I felt that it was important to give them the space and opportunity to speak. Therefore the questionnaire design included both open and closed questions. The sample size was 36; the parents of the children who had attended a six-week Forest School programme (11) and the parents of the children who attended an ongoing programme of Forest School (25). The second group was added in order to make the sample more reliable and allow for non-responses.

The third method used was group interviews. Groups of approximately five to six children were asked fairly structured questionnaire-type questions. While the interviews were by no means focus groups, certain elements of focus groups did apply to the group interviews. For example, there were some concerns about some members of the groups (being shy, quiet and sensitive) feeling unable to express their true feelings or opinions from the fear of peer reprisals or not feeling brave enough to speak. Whilst recognising that working with members who know each other can help with issues of self-disclosure (Jarrett, 1993 in Morgan, 1997) the real issues is that strangers and acquaintances can generate different group dynamics. On this occasion however, it was felt that knowing each other and myself, as interviewer, had a positive effect on the information gleaned, particularly for the less talkative members. One of the main problems, however, was stopping them from talking as well as from going off on a tangent (Greig & Taylor, 1999). Of course, it may have been likely that the children would just agree with what another had said or say the same just to give an answer, but the overriding factor was to reduce the intimidation that might be felt with individuals and spark interaction.

The final method used was to ask the children to ‘draw a picture of Forest School’. From this it was hoped that they would draw what they saw as the most important features of Forest School. This appears to be a new area for investigation, however Barrett and Light's study (1976 in Thomas & Silk, 1990) showed that five-year-old children present their standard schemata house rather than the one that they might be looking at. They argue that all young children start by making such generic drawings. This suggests that the pictures that the children drew for me do indicate the defining characteristics and as such could be seen by the children as the most important elements of Forest School.

**Findings and analysis**

**Observations**- Many of the quieter children in the group were very apprehensive at the first session whereas the more boisterous ones were very loud and constantly interrupting. As the sessions went on, behaviour seemed to improve. There was less interruption when someone was speaking and they seemed closer as a group; prepared to help and support one another rather than compete. In fact, one child in particular, at the start, was always saying he had done something bigger and better than everyone else, but by the last session he was not constantly competing and started to value others’ work and opinions as well as his own. He was able to have a proper conversation and share experiences. The children enjoyed all the activities, which seemed to give them the opportunity to explore the environment; use their imagination and creative skills; use tools; work co-operatively; listen to other’s opinions and share ideas; improve gross and fine motor skills; and experience the outdoors (including the weather!). There was also time to discuss things as a group, which seemed to increase their vocabulary, as they would get better at describing the things they had seen or done. The most interesting factor was the observable improvement in positive behaviour and confidence in almost all the children.

**Questionnaires**- One of the most interesting questions asked of the parents was whether they felt that Forest School had helped their child, and if so, what they thought it had helped with. This was the main focus of the study and the findings revealed some of the ‘tangible benefits’ that parents might need to be advocates of this new method of learning. The questionnaires showed that the parents thought that Forest School provided the following benefits in order of decreasing occurrence:

- Children’s increased enthusiasm for nature and the outdoors
- Children’s increased creativity, interest and use of imagination
- Increased confidence
• Support of language development
• Help with sleeping

Despite the limited number of returns, what was returned suggested that Forest School had had an impact on the children.

Group interviews with the children- In all 36 children were interviewed. 100% said that they liked playing outside. When asked what they liked to do outside, the responses were in order of decreasing occurrence: Role play/ Swings/ Run around games/ Getting dirty/ Gardening/ Walking the dog/ Forest School/ Climbing/ Skipping/ Having fun/ Toys. However, no conclusions can be drawn from these findings as the numbers were so small.

The children were asked how they had felt about Forest School before starting and how they felt now. What was shown was that most children had looked forward to Forest School before attending and continued to enjoy it. Enjoyment is a major factor in motivation and it was interesting to consider the comparison between what they cited as enjoying and what they felt they had learned. It seemed that using tools was specifically cited as something they had learned, but was not mentioned specifically in things they enjoyed doing, although some of the activities did involve the use of tools.

Cooking over a real fire, building dens, making things and using knives were very popular activities, as anticipated, but keeping safe and being careful came as a surprise. Whilst it is excellent that the children became more aware of potential dangers, I considered it to be more of an adult concept. Looking back at the literature, it suggests that children need environments that extend their ‘physical risk-taking’ and the subsequent link to building self-esteem (Dwek, 1999; Carr, 2001 and Tishman, et al. 1993 in Stephenson, 2001).

Children’s drawings- The objects that were found in the children’s drawings listed in order of decreasing occurrence were: People/ Trees/ Ground or Grass/ Weather/ Camp/ Tree houses/ Flowers/ Rope activity/ Dens/ Birds and Animals/ Fire/ Sky/ Crab apples/ Guardians

Summary of Findings/Discussion
a) Cognition and language (Rivkin, 2000; Maynard, 2003), where observations revealed an increase in vocabulary and understanding, and where parents’ questionnaires also revealed that the children were talking more about what they had been doing
b) Whether Forest School stimulated observable curiosity and motivation. Parents reported an increase in their children wanting to investigate the outdoors more and one said their child was ‘looking at grass more’. Therefore, it would appear that Forest School had inspired inquisitiveness in nature and the environment, thus giving them the intrinsic motivation needed to find out more and learn.
c) Freedom of movement was achieved as there was less restriction and children were able to express their independence by choosing where to do a task, e.g. build a den.
d) As far as handedness was concerned, there was no evidence of any difficulties the children might have had in motor skills, including fine motor skills
e) The children’s temperament also seemed to change for the better according to the observations and questionnaires.
f) The main finding was the increase in confidence which, for such a short time period, was very exciting.

Conclusion
The aim of this study was to investigate any tangible benefits found from empirical research, and the results were impressive for such a short time scale. Much of the previous research on Forest School had been undertaken over longer periods of time, so the limited time for this study was initially seen as a weakness, in that any changes in the children would surely need more time to develop. However, it actually proved to be a strength. If such benefits could be seen over six weeks, or indeed two terms (which cannot be seen as maturational), then what would the effect be if Forest School was used throughout compulsory schooling?

The main finding from this study was the increase in the confidence of the children. This was not only evidenced in the observations, but also by the parents themselves. The fact that the parents had noticed this was significant because they know their own children very well, whereas our observations would have highlighted that the confidence increase might be the result of them adjusting to the situation. The parents’
observations were also significant in that they actually saw ‘benefits’ of Forest School for themselves, which could be an important factor in gaining support. Larger studies would be needed to verify these findings.

E. Laura Puckett’s 3rd year research dissertation entitled; Forest school and the development of self esteem focused on issues of self esteem.

I know from personal experience, that many people have a slightly different view of what self-concept and self-esteem are and how they are differ, if at all. All these terms are so tightly bound and interwoven that it can be difficult to understand, but thanks to the work of Argyle (1970) in the UK and Rogers in the USA, we have more defined and generally agreed upon definitions. Argyle (1970) uses ‘self-concept’ as an umbrella term, because he believed that there are three aspects to the ‘self’. The diagram below shows how the terms fit together;

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  Self-concept
   |                   |
   | self-image         |
   |                   |
   | ideal self         |
   |                   |
   | self-esteem        |
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(Lawrence 1996:2)

The terms are summarised as the following;

Self-image ‘is the individual’s awareness of his/her mental and physical characteristics’ (Lawrence 1996:3), so this is who the person actually is. The ideal self is about the ideal characteristics that we believe we should possess and includes behaviour and skills. Self-image, according to Lawrence (1996), is the starting point for us to understand self-esteem. Self-esteem is ‘the individual’s evaluation of the discrepancy between self-image and the ideal self’ (Lawrence 1996:5). This is echoed by Plummer’s (2001) statement that self-esteem is not just dependent on measurable successes but it also depends on a strong sense of self-worth. Schaffer (1996:164) uses both of these ideas and says that,

’self-esteem refers to an individual’s feelings of his or her own worthiness and competence. It is thus the evaluative aspect of the self-system and is related to the image of an ideal self that we all have.’

Many people assume that a person’s self-esteem is either high or low; however, according to Apter (1997) this is not the case. She believes that children’s self-esteem undergoes a daily shift both in shape and intensity, and varies depending on the child’s mood, situation, the task at hand and attitudes of the adults around them, self-esteem is viewed as a continuum rather than a static position. However, this does mean that self-esteem is quite difficult to measure and assess, as it is then based on changeable variables. Shavelson and Bolus (1982) have developed the Self-esteem hierarchy;

```
GLOBAL SELF-ESTEEM
   | Academic          | Non-academic       |
   | English Maths Science Other | Social            |
   |                          | Physical           |
   |                          | Parent relationships Others Skills Appearance |
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(Lawrence 1996:10)

This shows the complexity of self-esteem and that a child can have lower self-esteem in one area, which may not effect their global self-esteem.

Self-esteem has its roots deep in the early years of life, according to Roberts (2002) and is strongly affected by the ‘significant people’ in a child’s life, which include parents, carers, siblings and first teachers. Young children pick up on non-verbal cues incredibly easily which most adults are almost completely unaware of. Both Roberts (2002) and Lawrence (1996) note that if the verbal and non-verbal communication contradict each other the child will tend to believe the non-verbal over the verbal. Non-verbal communication includes eye contact, body language and posture. Lawrence (1996) warns that although we may try to hide feelings of
dislike, for particular children, those messages will probably be communicated non-verbally anyway. Therefore we need to be sincere with children.

Assessing young children’s self-esteem is not an easy task, as you cannot ask them particular questions about how they feel about themselves, as it may not be a true reflection of their actual self-esteem. Apter (1997) suggests the reasons for this could be that children may have learnt that they are to say positive things about themselves, whether they feel it is true or not. Or they may freeze when confronted with a difficult situation they thought they would be competent in. There are a few methods of assessing self-esteem, the simpler ones to use are checklists of certain behaviours, which are usually associated with low self-esteem, some come in the form of questions such as:

- ‘Is he/she boastful?’
- Does he/she daydream a lot?
- Is he/she continually asking if he/she is liked or is popular?’

(Lawrence 1996:16)

Gurney P (1988), a teacher and psychologist, compiled a checklist of signs of low self-esteem under three different headings, school, home, and with friends which shows that children can have differing level of self-esteem depending on the situation and setting they are in. Other assessment methods include, the ‘Lawseq’ questionnaires, rating scales, adjective discrepancies, self-rating scales, semantic differential, Q-sort, projective technique and other questionnaires. The most commonly used are the checklists (Gurney 1988) and the ‘Lawseq’ questionnaire as both have been suitably standardised for the UK. However, it is still important to remember that not everyone will display the usual signs and responses of low self-esteem. Lawrence (1996:19) goes on to say that the ‘most reliable method of assessing self-esteem is to find time to get to know a student personally.’ Although this is not always possible, especially for teachers these days, as they seem to be swamped with so many other things to do; paper work, planning, marking, etc. Alongside assessing there are several suggested ways in which children's self-esteem can be enhanced. They range from specific enhancement programmes including Frey and Carlock's Eclectic Variations on a Humanistic theme and increasing self-esteem behaviourally by Pope, McHale and Craighead, to more simple suggestions from parental help guides and books. Plummer (2001) gives a list of adult behaviours that support self-esteem in children, which include; giving the children time, defining appropriate boundaries and giving unqualified praise. Surrey County Council (2003) also has possible suggestions to help adults enhance children’s self-esteem. I will use these and other checklists to help me analyse my data later in my project.

Research has shown that there is a correlation between self-esteem and children’s behaviour, between children’ self-esteem and teacher’s self-esteem and, a positive correlation between children’s self-esteem and their levels of attainment, specifically educational (Lawrence 1996).

An interesting statement about how we as a westernised country have become so consumed by the need for our children to attain and not to fall behind has, according to Lawrence (1996), led both parents and teachers to become quite anxious about children. Due to this anxiety, the fact that children learn best whilst having fun is being lost. Lawrence (1996:109) reminds us that ‘normal development is a process of coping with the experience of failure… it is not failure which should be avoided.’ This is quite an interesting statement, as it could go against what one of the main principles of Forest School which is to, ‘enable the individual to achieve’ by the use of ‘small achievable tasks’ (www.bridgewater.ac.uk 13.11.03a). Is the Forest School aim that children never fail? Failure is inevitable and we learn most through our failures and mistakes, otherwise, if we never fail how would we learn how to cope with failure, when it does eventually occur? Surely it would be better to learn how to effectively deal with failure when we are children so that by the time we are adults we have already mastered dealing with this inevitable event. I agree with Lawrence (1996:109) when he says, ‘it is not failure which gives concern but the way in which we adults react to failure.’ Therefore we, as significant adults should not react badly to the child but rather the behaviour and situation, in which the child has failed. We should do this by not making the reaction personal. i.e. hate the behaviour but love the child, this way the child’s self-esteem should not be affected adversely.

In Forest School like all settings I have worked in, I have noticed a change in the new children attending the settings. Initially the children were quite quiet and unsure, but by session four ‘the children ran off ahead as they knew where they were going. They went straight to the camp, sat down and were ready to start’ (feedback notes 18.03.04). I noticed that by the end of the six weeks, the children were becoming more active, lively and explorative of the area, I believe this could be due to the fact that they were feeling a great deal more comfortable with the woods, the adults and format of the sessions. I think we also began to see the true characters of some of the children towards the end of the programme, one example of this is A. The Feedback notes read that,
'There is a mischievous side that is coming out that wasn’t apparent at the beginning. Maybe [A] starts off from a place of wanting to please and behave but once he had done that he likes to play up a bit'.  
(Session four 18.03.04)

Another thing I have noticed when working with children, especially at CareScheme is when the children have become quite comfortable with the setting and the adults, they begin to push boundaries and ground rules. According to Bruce and Meggitt (1999) children will test the boundaries with all the adults, to see if they are all keeping them the same, which although this can become tedious is a way the children confirm their security. The boundaries need to be clear and consistent, which I think may be why the children at Forest School began to test them, as the rules were quite different to what they are used to at school. The teacher did comment on the discipline, in the questionnaire,

' I am not sure about the discipline expectations at Forest School and found that the children’s listening, following instructions skills weakened. And I have had to reinforce the rules in school about no shouting out and doing what is asked’. 

(teacher questionnaire)

In the first session (26.02.04), most of the children looked quite excited as they got out of the taxis, one child in particular was very excited, ‘A kept jumping up and down, whilst clapping his hands and grinning broadly’. Em and M were quite quiet and clingy to the teacher, Em was being ‘quite reserved but also very observant’ (Feedback notes 26.02.04). In the following week’s Feedback notes, it was said that ‘last week she [Em] was really quite with hunched shoulders and looking very withdrawn’ (Feedback notes 04.03.04). The latter of these actions, according to Plummer (2001), are possible signs of low self-esteem.

Throughout the first session B was also very quiet, had poor posture and negative body language, sat with hunched shoulders and looked at the ground with arms crossed. B initially rarely smiled and did not respond to specifically directed questions, possible meaning that B finds new adults quite difficult. Although, by the end of that session I observed him smiling, running around and joining in the activities and with other children. This change was not only observed in the first session but also seen throughout the whole programme, as B’s confidence developed more quickly each session as the programme progressed.

Experiencing failure.

During the Name game, in the first session, B became quite distressed and began to cry. I believe the cause for this could be due to some of the other children laughing at the suggestion B made; ‘B Banana’. Although, some of the children had begun laughing at several other people’s suggestions, including the adults, before we got to B so it was not directed specifically at him but I think the child took it as so. This again is a classic sign of low self-esteem (Plummer 2001) and Gurney (1988:47-48) notes that a child with low self-esteem ‘cries frequently’ and ‘is upset by personal mistakes’.

In the second session, all the children were given the opportunity not to play the Name game, which I initially thought was a little strange, as usually this activity is the main starting game of Forest Inspirations’ Forest School. It was revealed, by the Teacher to the Leader, before the session started, that B had had a similar incident to last week’s Name game, noted above, while at school. Therefore, the Leader decided it would be best not to put pressure onto B in case the same thing happened again. The reason for this could be because one of the main principles of Forest Inspirations’ Forest School is that a child is to achieve rather than fail, the Leader made the game optional to remove that chance of B failing. According to Schaffer (1996:164) self-esteem refers to an individual’s feelings of his or her own worthiness and competence. Plummer (2001) goes on to say that it is this sense of worth that enables children, and adults alike, to cope with failures and successes. If B’s feelings of competence were put into question by the reactions of his peers during the Name game, this may adversely effected his self-esteem. Cooley’s (1902) ideas about self-esteem is as symbolic interactionism and he believed that our ‘assessments of our own worth are based on the judgements we imagine others make of us’ (Elmer 2001:4). I completely agreed with this as I know from past experience that when I have felt and imagined that everyone around did not like me, I believed my feelings. Plummer (2001:15) sums this up perfectly, ‘a hundred people can tell him that he has done well but he will believe the one who says he needs to do better’, that one being yourself! Until you personally believe you are likeable, successful and loved you may always doubt it when others say it about you.

The following weeks B coped quite well with the Name game. In session four (18.03.04), B chose to play the Name game and he confidently but quietly said his chosen animal/object and seemed happy with that choice. Session five’s Name game was slightly different, as it was suggested that an action to be added to the animal/object. I thought that B would have said, ‘No I don’t want to play’, but B confidently said ‘B balloon’, which was followed by a quick action and B responded with a smile. However, in session six, B decided not to play which was said confidently while keeping eye contact with the adults, he seemed to enjoy
just watching and being part of the group. Plummer (2001) and Gurney (1988) both claim that a lack of or maintained eye contact is a possible sign of low self-esteem. This shows that B’s self-esteem may have been developing or he was becoming more comfortable in the programme. Even this small change, shows how more confident and comfortable B had become with the group, setting and the game, he felt comfortable with saying “No”, knowing that the Leader would not make the game compulsory. The fact that the children were given choice and the opportunity to say “No” was commented on in one of the questionnaires.

‘Children choosing to opt out of the name game. This in itself can be seen as the children feeling able to say “No I don’t feel comfortable with this” and so I don’t want to do it.’
(Appendix B4 assistant)

A suggestion made by Surrey County Council (www.surreycc.gov.uk 09.02.04) is that adults need to ‘create a situation where the children can make decisions and choices’. This may show to children that the adults respect their opinion, choice and it encourages the child to make decisions for themselves. Giving children choice is the kind of activity not only happened with the Name game but in each session of Forest School.

As the children were given the option to choose which activity they wanted to do first, i.e session four, they could either do Feely Bags or make popcorn and then the groups would swap over later in the session.

It was not only in the Name game that I observed changes, but also in B’s posture and body language, as previously mentioned, it was poor and quite negative at the beginning of the programme. Session three, shows this very clearly, he was sat alone in the camp, as all the other children had gone to play a game. This could have shown that maybe B is just unsure with new adults, as we had only been together for three sessions, a total of 6 hours, which according to Apter (1994) is another possible sign of low self-esteem. However, later on in that session, after we had made Sticky Crowns, B wanted to be a dragon and started to roar and play with the other children, which you can see illustrated in the photograph.

Leadership roles
In session five, B asked the Leader, if he could be the caller in the Traffic light game. This contradicts one of Gurney’s (1988) signs of low self-esteem, as it claims that children with low self-esteem ‘avoid[s] leadership roles’, which is quite interesting as B seemed to really enjoy suddenly being in a leadership role. Another assistant commented that B actually ‘enjoyed being a Leader and rose to the challenge well’ (assistant, 18.03.04). On the feedback notes (18.03.04), it says, B seemed unsure about how to deal with the fact that he was in control of the group initially… His whole face brightened up’ after some encouragement to call a little louder.

In session five, as I was helping Em and M with Tree cookies. B came over to see what the other two were doing and made good eye contact, answered my questions and happily showed me the Tree Cookie he had made. All of these actions show a good level self-esteem. This is a big difference compared to how B was in the first session, where he would not even smile back at me. I find it interesting, that B shows good levels of self-esteem in some areas and then lower levels in others. I guess this shows what Schaffer (1996) says about how self-esteem levels may differ depending on various changeable factors and not being a static state. Apter (1997:25) describes it like a layered cloud that ‘undergoes daily shifts in shape and intensity’ and that these changes depend on the attitudes of the adults around, the child’s mood, task at hand and the familiarity of the setting. This makes perfect sense to me, as even now I know that in some situations, usually familiar ones I am much more confident and comfortable than in new situations, especially when I meet new people. Consequently we should not expect children to be any different.

Et is another child that could display self-esteem as being a continuum. I initially saw Et as being quite confident and having quite a high self-esteem, but after looking at several checklists (Gurney 1988, Plummer 2001) I realised that Et also demonstrated some of the possible characteristics of low self-esteem. He found making and maintaining eye contact quite difficult especially with the new adults.

Eye contact
On a couple of occasions, I observed Et’s lack of eye contact and the main times this happened was when tools were being used. Another example was when Et became quite distracted while pair sawing; he kept looking around rather than at what he was sawing. The Leader stopped Et to reiterate the safety aspect of what he was doing, but before he said anything the Leader waited until both of them had made eye contact and did not let them continue until Et had. After the Leader had made eye contact, Et was usually much more focused, stayed on the task well and quietened down. Looking into someone’s face and eyes can be quite intimidating, I know that with people I do not feel completely comfortable I find it difficult to maintain eye
contact. I guess if a child feels intimidated, this may decrease their self-esteem, Plummer (2001) notes that avoiding eye contact is a possible sign of low self-esteem.

**Staying focused**

Et seemed to struggle with remaining focused on a task or activity for a period of time and was easily distracted. I observed that Et became distracted at least once in each session. The majority of these times were while we were talking in circle time, playing the Name game or when the Leader was explaining what we were going to be doing that day. Et would usually talk over people, stand up and wander around during the circle time. In the initial couple of sessions, Et was very distracted and it seemed that almost anything could cause this. However, this could be due to the fact that Forest School is a new experience and environment for Et and the other children to be in, so naturally there is going to be distracting things, as there are a lot of new things to see, hear, smell and experience. Gurney (1988:48) notes that children with low self-esteem are ‘easily distracted’ and have a ‘short attention span’, this is echoed by Plummer (2001). However, Et’s periods of distraction did decrease over the six-week period. In the second Feedback notes (04.03.04), for example, it says, ‘He does find it hard to follow any instructions’ and it is suggested that ‘perhaps being outdoors makes him feel more expansive with his energy. He always wants to do running around games’, compared to notes from session five (Feedback notes, 25.03.04) ‘he has shown much more group awareness…for the first time…he chose to walk back up to the car park’.

I also noticed that Et was always quite determined with things he says and chooses especially when playing the Name game. He less often thought of an animal/object that actually began with the same letter as his name, Et reptile for example (session three 11.03.04). Which, towards the end of the programme, other children would comment on and try and help him think of a same letter animal. Although Et was always quite sure that what was chosen was just fine and would say, “No, I want to be...” Another example of this is the Sticky Crown activity,

‘Et wanted a knight’s crown, which does not go around the head, like a normal crown, but one that goes from the top of the head down to the chin. I tried to explain it was not going to stick together but Et was very determined that this was what he wanted, eventually he understood and had a ‘normal’ crown.’

*(Feedback notes 11.03.04)*

The Name game and Sticky crowns examples could show that Et is very confident in his own opinion and is quite sure of what he wants, even if that goes against what everyone else is doing. It shows a good level of self-confidence in his own decision-making abilities, he seemed to know what he wanted and how to express it.

The most focused I observed Et being was in session four (18.03.04). We were going on an Animal Safari, in the woods and Et spotted a bird’s nest in the trees. This could show that Et had become a great deal more observant and less distracted compared to the first couple of weeks. By this stage in the programme, we had done a lot of searching for things on different levels, and the Leader had explained, during circle time, that the children were going to have to look high and low for the animals. He must have taken this on board, as no other child spotted the bird’s nest. Later in that session, we were making popcorn over the campfire and he was very focused while holding the popcorn maker, he was hardly distracted at all and did this activity for several minutes.

In session five (25.03.04), Et was initially quite focused for the first activity, Feely Bags, but as we walked past the other group, who were making Tree cookies, Et became distracted and wandered off to see what the others were doing. However, it did not take too much to get Et focused again. Et worked well with K and A, in finding objects for the Feely Bags, that fitted our describing words ‘smooth’ and ‘prickly’.

By the last session (01.04.04) Et was joining in with the other children, was quieter and more focused during circle time and actually answered one of the Leaders’ questions about finding firewood. This could show that Et was now listening to what the Leader had said during circle time and had remembered what kind of wood we needed for firewood and how dead wood reacts when you bend it.

**Conclusion.**

It is very difficult to assess whether the children’s self-esteem changed over the Forest School programme, as I only saw the children for a very short period and self-esteem is such a difficult concept to assess. Although I have seen some possible indications that self-esteem may have been developed and encouraged over the programme. I believe that the principles and ethos of Forest Inspirations’ Forest School definitely provides an environment in which children’s self-esteem could be developed and heightened. As it believes in ensuring the children will succeed as much as possible, to lead the activities where possible and to feel more relaxed in a less formal setting.
B’s posture and body language became much more positive: he smiled more and responded to questions directed specifically at him in one-to-one conversations. B made much more eye contact towards the middle/end of the programme and generally seemed happier to be at Forest School. Et became more focused, less distracted and he joined in with the other children when they were played. In session six (01.04.04), Et was climbing the trees with many of the children, which was a child-led activity.

The Forest School environment could be linked to Temple’s (1999) ‘Being in Charge of Others’ adapted from Illsley-Clarke and Dawson (1989). In this there are four types of people, two of these types can enhance self-esteem and the other two will undermine and destroy someone’s self-esteem. Nurturing and Structuring are the positive ways of enhancing self-esteem. A structuring adult will be ‘flexible, fair, definite, clear, consistent, sincere, kind, respectful and direct commanding’ and involves ‘contracts, ground rules, sanctions, behaviour policy, appropriate demands, limits and expectations’ (Temple 1999). Many of these characteristics match up with several self-esteem enhancement programmes and research. A longitudinal study of four-year-olds in three different educational settings by Schweinhart et al (1986) found that the ‘children who had had Direct Instruction (DISTAR) did not have as positive a self-image at ages 5, 8 and 15 as did others in the study who did not’ (Lawrence 1996:xii). They also found that the ‘two-thirds that did not receive Direct Instruction generally were seen to be more co-operative, more highly motivated with regard to higher education and less likely to be delinquent’ (Lawrence 1996:xii). Other suggestions made to help enhance a child’s self-esteem include; Plummer (2001:16), ‘having realistic expectations, modelling appropriate behaviour, defining appropriate boundaries, respecting’ children will enhance self-esteem. Surrey County Council (09.02.04) suggest parents need to show fairness and consistency; set agreed limits, make child-appropriate demands, set realistic goals and targets and be realistic with expectations of child. All these can be seen to match the Structuring adult (Temple 1989).

A nurturing adult will be ‘attentive, accepting, responsive, gentle, sensitive, empathic, affectionate and understanding’ and will support, give positive attention and validation of feelings, accepting of the individual, listen to and gives permission for the child to succeed.

I believe that this Forest School programme provides an environment that many of these positive attributes are put into practice, which in turn should help the development of children’s self-esteem. However, Elmer (2001) claims that the most important and influential factor on self-esteem is our parents. Consequently, I am led to the conclusion that unless both the educational setting and the parents are working collaboratively to enhance children’s self-esteem it may not be as effective as it could be. As the parents are the most influential factor in self-esteem this is where enhancing self-esteem needs to begin. Beels (2003:14) claims that ‘if children are to benefit fully from their outdoor experiences, the attitudes and values of adults are crucial’ and that the issues of concern, such as health, risk and safety, etc need to be overcome before that can successfully happen. Forest School, I believe is trying to do this and with more time, recognition and resources could be achieved.

F. Sarah Rogers in her 2nd year work based learning module in early childhood studies considered opportunities for language development.

My focus was to look at whether involvement in a programme of forest school influences the development of a child’s language and communication skills. I planned my approach to gathering data before starting forest school but in reality it was not as straightforward and it has been harder to gather quantitative and specific information.

We were not able to work with a consistent group of children due mainly to the nature of activities, which took place in larger groups. We often worked with one group on an activity but with the other children. This was helpful for getting to know everyone and becoming confident in managing an activity but less good for in depth time with target children.

I had hoped to watch ‘circle time’ or similar group times in the Forest and in class to establish whether the children who did forest school were contributing more frequently after their time on the programme, but these opportunities did not really occur.

Whilst in the forest it was necessary to be ‘hands on’ nearly all the time – particularly as the children were only 5–6 years old and some activities e.g. use of tools, fire building, involved risk, which I felt at times was not sufficiently monitored by the forest school leader and therefore required additional awareness by us as helpers/researchers. It was very difficult to take notes during the session, but we had thorough debriefs afterwards which were typed up and circulated.
Using a small tape recorder has been useful in terms of monitoring language, but I have found it difficult to identify who is speaking at times and have had the usual technical problems of it not working just at the crucial time!

The class teacher’s general comments about forest school have been summarised by Carole. In terms of language, the class teacher thought that the adult child ratio was important, also the opportunity to be in an exciting environment that had a different feel to just being outside the normal school grounds. The use of tools was important and she noticed the children using different language in the forest than in class – a few had said they found the name game boring and didn’t want to do it. She felt this would have been expressed differently at school – not using the word boring but asking if there was something different to do. She also felt that some children may have found it frustrating not to be listened to by others; something that they are aware is expected in class. She wondered if the freedom of forest school enabled them to express themselves more forcefully.

The children had tended not to talk about forest school much in class – she felt as if they ‘had left it behind in the forest’. This may have been because only half the children were involved. She did not feel she had witnessed new skills or abilities that she had been previously unaware of, but that some had ‘pushed the boundaries’ more than she would have expected. She felt it had particularly benefited R, a very quiet insecure child, and K. who finds it hard to listen and consider others at times but had experienced opportunities to do this. She also felt that some children had concentrated for longer on some activities than they do in class.

My thoughts about benefit to language and communication

I would agree that the opportunity to work in smaller groups with high staff ratios and with freedom and encouragement to talk and work alongside others in an interesting environment must surely be beneficial to a child’s language skills and other forms of communication. There were plenty of opportunities to express themselves creatively and physically as well as developing confidence at contributing to group discussions and expanding their vocabulary. It would have been even more positive if the group had been smaller allowing more time for 1:1 interaction.

I enjoyed spending time with children in class on some afternoons following forest school, where we talked about what we had done, what they had really enjoyed and sometimes completed drawings, paintings or writing about their experience. I would think that this reinforced some of their memories, some of the vocabulary (words like fire pit, storm kettle and tree cookie became well remembered and used) and gave further opportunity to interact as a group and as individuals with a common bond.

Two children who were very quiet to begin with seemed to gain in confidence as the weeks progressed. R seemed to speak more assertively by the end of the programme and T, a very shy sensitive lad, was instigating conversations in the forest on session 5 and with me in class. Unfortunately he was absent for 2-3 sessions, but his Mum commented that he talked about forest school at home a lot and was happy being with people during forest school, something he normally finds hard.

K can be a challenge in class at times. She gets bored easily and finds it hard to listen to suggestions. In the early weeks in the forest she tended to dominate, often jumping in and talking for other or needing attention, becoming sulky if she was not able to sit where she wanted or hand out the biscuits. These behaviours seemed less noticeable in the last 2-3 sessions and she seemed more comfortable being part of the group around the fire, interacting with others, less need to dominate.

Activities that encouraged language and communication

Name game – children gave their names and an animal beginning with the same letter. Became a bit boring for some, needed reminding to listen to others, to wait their turn – needed speeding up. Varied it in session 5 and 6 by adding an action or noise – some children chose different exciting animals and although some needed prompting most came up with an interesting noise or action.

Touchy/feely activities – passing round items to describe – repetition is important as on second time of playing a broader range of descriptive language was used.

Fire building – the need for sticks to ‘crack’ to be dry enough seemed to stay with everyone. Several words given in class after session 5 referred to fire building.
Listening game – closing our eyes whilst sitting round the fire pit to see what we could hear. Over several tries the range of sounds heard developed to include the wind blowing the trees, birds singing, fire crackling, footsteps...

Use of tools – great opportunity to talk about their names, how to use them, also to work in cooperation, as often one or two children needed to hold a log, whilst someone else sawed. Needed to wait, take it in turns. Great confidence giver as activities were all achievable and satisfying.

Sherpa walk – 6 children, one leading with a big rope tied round the waist, others holding on and following the leader around the forest. Leader needed to be aware of the group, wait for those finding it hard, untangle the group at times. Everyone had a turn to lead. Needed to cooperate as a group, talk to each other.

The rope game – everyone standing inside a circular rope, leaning out to maintain tension and support our weight. Eyes closed, counted to 3 as a group then tried to sit as one. Managed it well, lovely feel of achievement and togetherness.

Making forest friends – sawing then whittling wood, decorating to make a small person to guard the forest. We talked through and demonstrated the activity – they needed to listen and watch, which they managed well. Children talked a great deal about their person – how they decorated them ‘wings – she’s an angel’, ‘he’s an Indian to guard the forest’. William came up with the term ‘forest friend’. Several were used in imaginative play in the playground and in school later in the day. Similarly with making tree cookies – several tools involved – most children remembered the names of items we had used and the process we went through to make them. Tended to work in isolation whilst making them but lots of interaction, comparisons and descriptive language used when they were being worn.

Conclusion
Judging from the questionnaires from parents, it was a great topic of conversation with family and friends outside of school. It will be interesting to see how much this experience stays with them and to see if the quieter children retain their growing air of confidence.

G. Rachel Williams 3rd year independent study module essay entitled: An Analytical Discussion of Forest School and Observational Study of Forest School in Practice.

The children studied.
During the Forest School sessions I observed John and Joe (names changed to protect identity). Joe is an elective mute and has self-esteem issues, and his family, at present, are being investigated by the social services. John has a significant language impairment, which involves his expressive skills being better than his understanding of language (this is not the normal pattern for language impairments). His score in tests for the above impairment were more typical of a child of several years below his age. John also suffers from juvenile arthritis but there appeared to be no problems with this throughout the Forest School sessions. Worcestershire Forest School have “found [that] the combination of freedom and responsibility has been particularly beneficial to children with little confidence or challenging behaviour” (Maynard, 2003, p2) thus proposing that attending these Forest School session could prove beneficial for Joe’s self-esteem and John’s behaviour as a result of language problems.

Through the setting up of these small achievable tasks, Forest School is setting up the individual to succeed, which in turn has a positive effect on a child’s experience at school. My observations, from session 3 demonstrate the effects of succeeding and not succeeding at a task; the children had to cut a piece of hazel off a tree and then cut it up into smaller pieces for the guardian’s body. Joe was helpful and good at cutting, he helped to hold up the branch although found it difficult to cut. John had a go and was good at cutting the branch but also found it difficult so gave up shortly after. I think the reasons that both Joe and Jack gave up on the task shortly after they started sawing was I gave the boys a branch to cut, which was too thick for them to manage. They found it difficult to saw through and were therefore not succeeding, this in turn had negative effects on the way they felt about themselves, resulting in John and Joe giving up on the task. So, instead of setting small achievable tasks that they could succeed at, I set them a task which set them up to fail. Later on in session 3 a similar thing happened; each child in my group sawed off a piece of wood to make their guardians. John seemed to enjoy this part and was very speedy at sawing. Simon came and helped at one point and we both encouraged John to keep going, which he did. However, John stopped
sawing when there was only a little way to go and said quite firmly ‘no’ that he did not want to do anymore and walked off. The Forest School leader went over to talk to him and encouraged him back to the activity. John came back over and finished sawing the piece of wood, we both said ‘well done’ and he looked very pleased with himself as he had a big smile on his face. From this observation I concluded that again John gave up on the task because it took a relatively long time and perhaps he felt as if he were failing, however the task ended successfully, which hopefully rectified the feeling of failure into feeling happy because he had succeeded at this task.

Opportunities for movement.
Bilton explains in his book *Outdoor Play in the Early Years*, (1999) that "So much of outdoor play is about learning through movement" and then later on, “movement is probably the most crucial mode of learning for young children”. The reason for this, as Bilton (1999) explains further, is that movement is the one factor which is common to each area of development within a child. Movement is connected to the child’s physical, intellectual, emotional development and each of these areas can be examined in movement terms.

Through movement children can express their feelings, whether by skipping for joy, running, stamping to let out anger, or walking to get rid of tension. But more than this, success in movement can improve the self-image. Success in movement reinforces children’s self-image, how they feel about their body will affect how they feel about themselves (Gallahue 1989, cited in Bilton, 1999)

Looking at this in terms of Forest School, movement is integral to the whole experience; the children are walking and running around during games and the other activities; they are using tools; they are following actions when singing and they are using fine-motor skills when making things. Through the setting up of small achievable tasks the children are able to succeed this in turn enhances their self-esteem and as a result of succeeding in this task the children are also succeeding in their movements, which, as is mentioned above, will positively reinforce their self-image - how they feel about themselves and their bodies. The most advanced level of movement, as explained by Sally Goddard Blyth (2000, cited in Maynard, 2003), is “the ability to stay completely still”. Goddard Blyth asserts that “children who are unable to sit still are showing advanced level of movement, as explained by Sally Goddard Blyth (2000, cited in Maynard, 2003), is “the ability to stay completely still”. Goddard Blyth asserts that “children who are unable to sit still are showing advanced level of movement, as explained by Sally Goddard Blyth (2000, cited in Maynard, 2003), is “the ability to stay completely still”.

Therefore, John’s behaviour could have been affected by many things. Bilton (1999) points out; "Children’s behaviour is affected by many things: … the type of morning the family has had… tiredness, illness… but … the environment also has an effect… evidence has shown that:

- Overcrowding can affect children and cause aggression
- Being given uninterrupted time to work will encourage children to persevere more
- In big open spaces children can feel lost…”

Outdoors as a learning environment.
Bilton (1999, p. viii) identifies principles that need to be adhered to so that outdoor play can be effective and to meet the aims as presented by the Devon County Council (1988, 1999) and by Hopkins and Putnam (1993). These include; “outdoors is both a teaching and learning environment, outdoor play is central to young children’s learning… the outdoor[s]… offers children the opportunity to utilise effective modes of learning- play, movement and sensory experience, [and] children need versatile equipment and environments.” Edgington (2002, p. 22) also offers a list of what children need to develop in the great outdoors: “space to be physically active and to develop and refine the full range of large and smaller movements… a chance to use materials and resources in ways which are not possible indoors, realistic challenges for physical, social, emotional and intellectual development which help them to develop a sense of themselves as capable achievers, support from empathetic adults who can help them make connections in their learning and who support and extend their ideas, [and] suitable clothing and footwear which enables them to move freely and safely and to experience a range of weather conditions.” Every requirement that Bilton (1999) and Edgington (2002) suggest as being crucial are met by Forest School in the following ways;
the children are being guided by the Forest School leader and he is teaching them new skills and about the environment and through this they are learning; the children are using play during the games and some of the activities, the children are always on the move when building dens and searching for the materials for these and all this time they are gaining sensory experience through all their senses, they are seeing this new environment, they are touching when they are collecting forest treasures, the smell of the grass, trees etc. and the sound of the stream running, the sheep and the birds singing. The children are also provided with versatile equipment through the use of different tools such as saws and pen knives, the environment is versatile because it has a wooded area, a stream and a field enabling the children to do many different activities, from collecting sticks, leaves and anything else that can be found to running around playing games. This versatile environment also has the space for all children to be physically active and through the different activities they can refine their fine and gross motor skills, the children have realistic challenges as it is forest schools belief that each child should have small, achievable tasks that meet each child’s level of development so that they can succeed. There were many assistants as well as the Forest School leader to support every child; the teachers would link the children’s learning to what they were learning at school. I think if the duration of Forest School was over a longer period of time then the Forest School assistants would have been able to extend on each child’s learning a great deal more. As the Forest School leader said about John that if this programme was continuing over a longer period of time say over a whole term, and the staff/assistants were able to work on a one-to-one basis, then we could have extended on John’s great interest in animals, through future activities. This would hopefully improve his confidence resulting in a possible improvement in his behaviour i.e. from not listening, easily distracted, lack of concentration on a planned activity.

Gradual change.
I thought on several occasions that John and Joe’s behaviour had not really changed, Joe more so than John, because I would write my notes up after the session and felt I was writing the same thing. I think I was expecting a major change to occur however, when talking with others and reflecting on each session, I discovered that subtle changes had occurred. This made me realise that any changes would be a gradual thing and that they would grow with the experience. Examples of changes in Joe include; in session 2, Joe offered some un-prompted and positive words about his experience of den-building. This is very positive because, although Joe does speak very little he does not usually volunteer communication. In session 4 it was noted in the evaluation that Joe was coming out of himself a bit more and that voluntarily spoke to Simon when he arrived at Forest School this week, which is very significant as he doesn’t often speak. In session 5, Joe was communicating more and smiled more. Generally there was a lot more non-verbal communication through his smiling and eye contact. The majority of John’s behaviour was consistent throughout sessions 1 to 4, he would run off ahead when going to do an activity and he would only be engaged in an activity for a short while before going off to the stream to throw sticks at the crocodiles. In session 4 I felt as if his behaviour had got worse as he was loud, noisy and hyper when sitting around at the beginning of the session and he did not seem to listen at all well. In the end of session evaluation the Forest School leader explained that he was very aware that there was more frenetic energy within the group. He also explained that he had observed this in previous programmes where, as the children become more comfortable and confident in the woods, so more of their typical behaviour patterns begin to come out. We also agreed that this type of behaviour may well be evidence of John testing the boundaries with his new found confidence. In session 3 there was a moment which I felt demonstrated John’s growth throughout the Forest School experience; the Forest School leader began demonstrating making guardians and whittling and John’s attention was fixed on the demonstration for quite some time. This was positive because his focus was not great when it came to carrying out an activity. The leader demonstrated sawing some of the hazel off and allowed some children to have a practice go. John was one of these, he was good at this task although he kept looking up at everyone else, whilst sawing and was not concentrating very well on the task. Another reason why I did not think he showed a great deal of satisfaction was because later on in the session when John was making his own guardian, he looked so much more pleased with himself and more satisfied once he had completely sawed through the wood. The biggest change that I saw in John’s behaviour was that from session 4 to session 5. In session 5 there was a noticeable difference in John’s behaviour, he was more focused, he listened more, was more interested in the planned activities and was asking about doing activities that he had done before like the animal safari from session 4. John also ran off less but when he did he wouldn’t go far. It was more obvious that he was enjoying the activities this week through his body language and communication with the Forest School leader. He seemed to especially enjoy the song ‘5 in the bed’. I was so pleased at the end of the session because I was doubtful that I would see a change in John’s behaviour during this short time at Forest School and I was really hoping there would be.
Conclusion.

Joe’s self-esteem increased a little and as a result he communicated more whether it was verbal or non-verbal and John’s behaviour improved, although I do not know if his language impairment improved. This is demonstrated through the gradual growth that each child went through and the changes that occurred in each of them, as is noted in my observations.

H. Julie Winsor’s 3rd year research dissertation entitled: Forest School- The Children’s Voice (A study into the children’s views and perceptions of a Forest School Pilot Project, January- July 2003) considered the opinions of children who had previously experienced forest school.

Literature Review: The Children’s Voice
Recent literature related to doing research with children suggests that access to children’s thoughts and perceptions cannot be confined to asking questions. What is required is the use of innovative and creative techniques (Clark and Moss, 2001). The ‘Mosaic approach’ as a framework provides ideas on ways to listen to children’s perspectives on issues in their lives. The approach combines visual and verbal, multi-method data collection in a participatory process. Observation and interviewing are used within this approach, along with innovative techniques such as use of disposable camera, tours led by children and mapping using photos. Tape-recording of mapping sessions provides further illumination, as does the use of ‘small-world’ play figures in role-play. The second stage of this approach consists of combining the data collected from the children’s views with insights from their practitioners and parents in collaboration to reveal a holistic interpretation of the children’s feelings and perceptions.

According to Messiou (2002) children’s views on aspects of their education have been neglected due to their perceived inability to give accurate information. He argues that children’s voices should be heard, particularly in the field of inclusion to gain access to children’s thoughts. He concluded that value was gained in facilitating this access, particularly to enable teachers to modify their practices.

Punch (2002) in her own research, used a combination of visual, written and traditional methods to access the voices of children. She found that using these combinations was valuable, alleviating the boredom issue, balancing biases, triangulating and enabling cross-checking of data. She emphasises that, rather than tailor research methods to research subjects, the focus must be shifted to a holistic research context, treating each research project individually and on its own merits.

Accessing the voices of pre-school children however is problematic (Evans and Fuller, 1996). Issues raised in their own research were reliability, issues of power, ethics and levels of communication skills. Most of these issues were addressed in their research by providing nursery equipment, the researchers finding that children communicated freely to a strange interviewer through this medium.

The imbalance of power between adults and children in research is also identified by Thomas and O’Kane (1998) as an important issue, particularly if the research is of a sensitive nature. They emphasise the necessity of participatory techniques to access children’s voices such as drawings, timelines, activity sheets entitled, ‘my favourite place’ or ‘what I would change with my magic wand’. These participatory activities may help to redress the balance of power often held by the adult researcher.

Drawings were also used by Coyne (1998) when eliciting children’s views on their own, their parents’ and the nurses’ roles in their nursing care while in hospital. She found that it was a successful technique used at the beginning of a data-collection session to put children at ease and to establish rapport. The interviews were tape-recorded which allowed the children the freedom to choose conversation topics that may have been unrelated to the research topic. Coyne (1998) concluded that children may prefer to be interviewed in groups but reciprocity must be established with the adult in the participant research making some sort of connection, whether through playing games, helping or gaining the children’s interest through conversation to build up familiarity and trust. The researcher must be receptive, never imposing his/her own perspective on the data collected, researching *with* and never *on* children and ensuring children’ privacy is respected, an issue Coyne found difficult in her research.

While the benefits to adults of accessing children’s perspectives may be obvious to inform practice, curriculum content and pedagogy styles, what are the advantages to children? Roberts (2002) lists contributions to high self-esteem such as control and power, competence, values and acceptance.
valuing of children’s opinions and views, adults can facilitate control and power, the improvement of competence and acceptance, thus contributing through the listening process to children’s levels of self-esteem.

Much research involving children today is used to formulate social policy that profoundly affects their lives and therefore research that ‘gives power and voice to child research participants and which provides insights into their subjective world is necessary’ (Grover, 2004, p 81). While social research is often concerned with group trends rather than individual case studies, research in which children have become ‘active participants’ has generated ‘moving and meaningful’, ‘rich and complex’ data.

Pugh and Selleck (1996) ask whether our culture takes children’s views seriously or even listens to them at all and demands that it is the right of children to live, work and play with adults who listen to them. In order to do this adults must understand the child’s stage of development, listen reflectively, observe and interpret, be accepting and respectful and help children to manage their emotions while expressing their feelings.

It is clear that outdoor education has evolved and developed through many stages; though it may be argued that the Forest School principles listed merely illustrate a return to the principles of the early nursery education pioneers. If we are to access the participating children’s perceptions of an outdoor education programme it is necessary to adopt a creative, multi-method, participatory approach taking due regard to issues of power, ethics, developmental stage and interpretation.

**Research methods**

This study involved exploring participant children’s reflections of their experiences at a Forest School pilot project within a primary school and analysing the reflections to explore the children’s perspectives: listening to children’s voices.

My perception of research with young children is articulated by Graue and Walsh (1998) as ‘a disciplined form of hanging around with kids who are smarter about their world than you are’ (p91). This type of research data is generated rather than collected. The acquisition of data from children has to be ‘an active, creative, improvisational process’, data does not wait for collection, the children have to be encouraged to produce it. While the researcher must enter the process with pre-determined questions, once the research begins the questions may develop and change. While lack of knowledge may have prompted the study, complete ignorance about the field of study can be counter-productive.

The structure of my research project took the form of a case study which is identified as a systematic inquiry of a specific instance. The case study can provide ‘rich and vivid description’, a merging analysis and an understanding of individuals’ or groups’ perceptions of events (Cohen et al., 2000). A variety of methods may be used for a case study depending on the aims and purposes of the research (Bell, 1999). The ability to be adaptable enough to allow for unanticipated events and the capacity to be understood by a wide audience made the case study approach attractive for my research aims.

I chose a narrative style for my case study in that I collected reflective stories in relation to the Forest School pilot project. I felt this to be appropriate because I was asking the children about their memories of the Forest School programme that had finished 5 months previously. The multiple methods I used included individual semi-structured interviews referring to a class book of photos for prompts. The children also participated in focus groups prompted by watching a video made of them in the woods. Finally, during a large group discussion I used a teddy as an independent focus to which the children could describe their experiences of the forest school project. These three data collection methods were tape-recorded, after clearing this with the children and explaining that I would not be able to remember what they had said. The children were also asked to draw what they remembered about their forest school experience as an alternative form of narrative (Allen, 2002) and the older children annotated their pictures.

**Findings and Discussion**

Almost overwhelmingly, Forest School was viewed in a positive way by the children. Throughout all the data collection methods a wide range of recollections and memories were shared readily and enthusiastically by most children revealing rich, satisfying experiences.

The children were asked outright about their favourite part of the project during the individual interviews. It is interesting to note that while many of the answers refer to instances in which the children were active participants, the activity mentioned most often is one in which the children’s main role is that of observer, i.e.
making hot chocolate. Other activities involving fire and food were very popular in the children's recollections. Perhaps this is easy to understand as they occupy all the senses: visual, aural, olfactory and touch, through the feeling of heat, to impact upon consciousness and to produce a tasty end product. It is widely accepted from the work of Vygotsky and other theorists (Edgington, 1998) that children learn through interactions with people and the environment, needing to be actively involved and using their senses to experiment, practise and refine while solving problems, talking, questioning and imitating others.

There were, overall, few negative responses to Forest School collected during this study. One reason may have been that all the children were well aware that the adults involved in the project were enthusiastic and positive about the project thus influencing their responses.

The fact that I in the role of researcher was also familiar with the children and the Forest School topic was an aid to understanding and interpreting the children’s responses. There were times when what the children said could have been ambiguous, however my knowledge of them and the context helped to clarify the meaning.

The class photograph album clearly influenced the interviews. There was a large number of references to sensory and environmental experiences and also creative or tool activities all of which were captured in photographs. While the topics represented in the photographs did influence the topics discussed, they also sparked many different memories that were not immediately visible. For example, the photo of children using the saw reminded a child of the hazard of sawdust blowing in his eyes.

Almost all the sample children provided a drawing of Forest School. The younger children’s drawings show a varied range of subjects connected to their experiences. One child drew six different aspects of Forest School which seems to support the theory that drawing can be a form of communication. This method yielded mainly drawings that involved fires and food while self-esteem and sensory awareness activities were represented less often. It may be argued that self-esteem is easier to talk about than draw or it may be concluded that the children have recorded in their drawings and writing the activities in order of personal importance or preference within the experiences.

The groups who watched the video discussed the activities that were recorded. However the large number of emotional responses was startling, with many clearly articulated sentiments that expressed a variety of emotions such as delight: ‘I loved Forest School’, regret: ‘I wish I was still there, in the woods’ and recognition of identity: ‘that was when I was five, before my birthday’. My interpretation, on being present during these focus groups, and from my information in the tape transcripts is that the children became very excited when they saw the events as they actually happened. This clearly stimulated their memories. The video provided the added bonus of stimulating many exchanges between children making it almost unnecessary to question them. One child asked someone else in the focus group where she had found the log she could be seen carrying in the video and another boy puzzled over why he was not in the video only to remember that he had attended a different session. These interchanges suggested that the use of video in data collection can stimulate the promotion of problem-solving skills. Many children remained absorbed and almost mesmerised by actually seeing the events they had experienced being replayed before their eyes. Even though some were not as articulate as others, their level of involvement in the contents of the video could be ascertained by their facial expressions and levels of concentration.

The idea for the final session of data collection was prompted by my desire to distance myself and try to remove any effect that I might be having on the children's responses. I was aware that I had taken part in the Forest School project and I had interviewed the children; I was curious as to how the children would relate their experiences of Forest School to an independent body. They were asked to describe to a big Teddy Bear what happened at Forest School. The high number of organisational recollections perhaps indicates that they were filtering information and deciding what was important to convey to someone who had no experience of Forest School. Some children referred to instances they disliked, the tastes of foods like potato bannocks and marshmallows and also smoke affecting eyes. They also referred to some of the safety rules that had been established at the beginning of the Forest School programme. They told big Ted that they had to remain with the adults and not run or stray too far from them. This prompted further discussion when a child realised that they did not stay with the adults when they played hide and seek. The issue of staying within a boundary came to light along with a growing sense that they might become responsible for themselves within given boundaries.

While many of the self-esteem raising, sensory and environmental awareness activities were presented as active games at Forest School, the high number of recollections of these activities, using no stimuli,
highlights them as a potentially successful method to promote learning dispositions, extend skills and to help the children to achieve in a non-threatening, supportive environment. The children’s capabilities, recalling information such as the sequence of fire-building, the safety aspects of using fire and how to discover if a stick is dry enough to be used as kindling reveals the effectiveness of the active, participatory style of pedagogy.

Evidence of success of the Forest School pilot project, in terms of benefit to the children in the acquisition of knowledge, the raising of self-esteem, the progression of problem-solving skills, learning dispositions, promotion of active learning and responsibility for personal learning with its long-term implications for both children and school is provided within this study.

**Conclusion**

The research began as an investigation into participant children’s perceptions of a Forest School pilot project. It was designed to access their thoughts, opinions and views on that outdoor experience. As the research progressed it became obvious that the Forest School focus had provided rich and varied experiences and the children were enthusiastic and responsive on the topic.

The data collection methods, particularly the video-watching focus groups and the large group interviews were immensely successful in providing opportunities for adults to listen and for children’s voices to be heard. Therefore it is suggested that techniques of this sort, planned into curricula, could inform and measure pedagogy and practice effectiveness and also provide evidence for assessment.

I was amazed by the depth and sophistication of the responses within the focus groups watching the Forest School video. Having witnessed and recorded the children while they puzzled and problem solved as a result of stimulation by the video, I would use this method again with more confidence. The beauty of this exercise is that all that is required is a video of the children participating in their usual educational activities. Perhaps the success criterion here is the relevance; there is little more relevant then actual experience. Use of such review techniques to relive and evaluate a project has helped me see that a topic, particularly if it has enthused and absorbed the children, can be examined from different angles, reviewed through a variety of media, presented through different contexts and given the essential, though often least considered component with early years practice: time.

This research has reiterated some points raised from the literature. It has identified the need for a multiplicity of teaching approaches within outdoor education linked to context rather than the application of one particular approach whatever the circumstances. It has highlighted the mistake in underestimating children’s abilities to share relevant information as well as the need for a high level of interpretative skills, prior experience and knowledge of context and development of children to undertake naturalistic research with young children. It has illustrated the necessity to develop creative, innovative methods to access young children’s voices and has confirmed that research in which children are active participants generates rich and complex data. It has also illuminated the benefits to child, adult, school, community and society of redressing the child/adult power imbalance and accessing those buried voices. It has demonstrated through the children’s enthusiastic and frank articulation, evidence of the value, relevance and success of the Forest School pilot project. Finally, it has brought to light some successful teaching strategies and reaffirmed my belief in the value of accessing, listening and acting upon children’s voices.
The Forest Education Initiative (FEI)

The Forest Education Initiative (FEI) operates throughout Great Britain and was conceived in 1992, with the mission to 'increase young people's understanding of the local and global importance of trees, woodlands, forest environments and the wood processing industries'. FEI in Wales has been the leading body for the expansion of Forest Schools, and also supports local groups in England.

The FEI comprises a partnership of BTCV, the Field Studies Council, the Forestry Commission, Groundwork, The Tree Council, the Timber Trade Federation and the Woodland Trust. The broad spread of the partnership allows FEI to work in diverse ways to assist young people to make the vital link between trees and timber products, to enjoy and appreciate trees and wood and to understand the sustainable role they play in our lives. FEI involves young people in forest education activities with the emphasis on first-hand experience and provides them with easy access to local wood-based resources. Creating greater awareness in schools of the range of learning opportunities presented by trees, forests and the processing industries is a high priority and FEI has forged links with a variety of teachers who benefit from the availability of teaching materials directly relevant to curriculum requirements.

FEI already supports the development of local Forest School settings (FEI recognised Forest Schools), by offering local and national expertise and advice from the 7 FEI national partners and access to internal funding as a constituted FEI cluster group.

Currently, FEI support Forest Schools that have:
* The support of the local FEI cluster group
* The support of your FEI co-ordinator
* A local woodland setting and therefore links to the learner's local community Leaders that have been CRB/Scottish Disclosure checked - trained in or training for Forest School qualifications (BTEC and OCN) and with appropriate First Aid qualifications
* On-going ecological impact assessment of the woodland site used for Forest School
* Comprehensive risk assessments of the Forest School site and activities
* An up-to-date Health & Safety manual including guidelines on child protection, emergency procedures, risk assessment and equipment
* On-going evaluation of learning and personal development of all those involved in Forest School
* Commitment to external reviews and sharing of best practice within the network

Further information on the website at www.foresteducation.org

Devon Early years Development and Childcare Partnership (zero14plus)

The Government's National Child Care Strategy requires every local authority area to set up an Early Years Development and Childcare Partnership to develop and co-ordinate local services for young children and their families. zero14plus is the Devon Early Years Development and Childcare Partnership.

A wide range of interests is represented on the Partnership, including the local authority, early education and childcare providers, parents, employers, and other interested organisations.

The Partnership is committed to improving childcare in Devon. Part of this task is to draw up an Early Years Development and Childcare Plan detailing how the Partnership, will make this happen.

Further information on the website at http://www.devon.gov.uk/zero14plus.htm