The Queens Wood Forest School Report

Observations and Reflections
An Overview Of A Year-long Forest School Programme With A Year 4 Class

Martin Cook
Cathy Velmans
Chantelle Haughton
2012
Contents

Introduction 3
Project members 3
Background and context 5
Site 6

Project overview 8
Aims of the project 8
A multimedia approach for data collection 8
Session plans 11
Managing risk 13
Emerging findings 14

Observations 15
Children’s choices: Learning stories 15
  • Scorpions in the stream 16
  • A journey to the secret hide-out 19
  • To be heard and not seen! Hiding games and secret codes 21

Long term activities 23
  • Making a rope ladder 23
  • Creating steps 26
  • The saw horse 27
  • Into the swing of thing – with a hammock 27

Pause for thought: Discussion points raised during the programme 29
  • The golden moment 29
  • To see or not to see? 30
  • Home or away? 31
  • Ready or not 31
  • Structure vs choice 36
  • The accepted truth? 38

Final thoughts 41

References 42

Appendix 1 43
Introduction

The Project Team

The project was a collaboration between Forestry Commission Wales, Cardiff Metropolitan University and Meadowlane Primary School in Cardiff. Cathy, Martin, Sheena and Chantelle took part in this year-long project. Fifteen children from a year four class attended the sessions over the academic year supported by four Forest School leaders, school staff and Cardiff Metropolitan University students all contributing at various points throughout the programme.

Martin Cook - Martin is a senior lecturer at the Cardiff Metropolitan University (UWIC). Martin has spent his whole career in education, working with primary school pupils and lecturing about primary education. In the eighties he joined The Association for Environmental Education and The Institute of Earth Education. Since the early nineties Martin has run an Earth Education programme ‘teddy bears’ picnic’ at UWIC and is at present working with
colleagues as part of the outdoor learning team offering continuing professional development (CPD) to students, teachers and school support staff. Martin is a qualified Forest School leader and has taken part in the Welsh Government funded Training the Trainers initiative. He is a member of the Forest School Training Network in Wales (FSTN). He is interested in finding robust models of measuring the effectiveness of Forest School on children.

Cathy Velmans – Cathy is an Education Development Officer for Forestry Commission Wales (FCW). She has worked at various centres over the last ten years delivering environmental education programmes. Since joining FCW in 2006 she has completed a PGCE in Post Compulsory Education Training and her Forest School practitioner training. She has run Forest School programmes for a wide diversity of groups and is a member of the FCW Forest School training team. She has led on various projects designed to increase the use of the outdoors and extend Forest School practice, such as re-invigorating the literacy sculpture trail at Goytre Wharf and creating a tool bank for practitioners in Newport to develop and extend their tool use skills with children.

Sheena O’Leary – Sheena is an Education Development Officer for Forestry Commission Wales where she has worked for the last eight years. She trained as a primary school teacher in 2001 and taught in early years before turning to environmental education and working in an outdoor education centre. She is a member of the FCW Forest School training team. She has coordinated several projects with schools including “Words in the Woods” with Theatre Iolo and the “Lost and Found” sculpture trail at Fforest Fawr. Sheena qualified as a Forest School leader in 2006 and has since led Forest School in a variety of locations with children of all age groups.

Chantelle Haughton is a lecturer on Early Childhood Studies and Educational Studies degree programmes at Cardiff Metropolitan University. Chantelle is a trained Forest School leader and is a member of the outdoor learning team at the university. Chantelle leads regular Forest School, outdoor learning projects and CPD training in the
university campus woods as well as in nearby community settings. Chantelle works with children and practitioners from pre-school settings, schools, community groups, home educated children, hospices and other organisations – her sessions are usually supported and observed by students. Chantelle is in the process of undertaking PhD research into contemporary understandings and interpretations of the Forest School ethos.

**Background and Context**

The Forest School approach has been written about extensively in recent years. However, it is prudent to offer a definition and philosophy that permeated this year-long project. Forest School is predominately about individuals exploring and experiencing the natural world on their own terms. It is about learner-initiated exploration within the risk-assessed Forest School area. Through stimulating, creative play learners should enhance their problem solving, communication and social skills. It was the aim of this Forest School project to create an environment in which this could occur. Forest School is defined by Forestry Commission Wales as ‘An inspirational process that offers children, young people and adults, regular opportunities to achieve, and develop confidence and self-esteem through hands on learning experiences in a local woodland environment’ (FCW, 2009, p.1). The Forest School approach has been popular within the Foundation Phase, however, there seems to have been less focus upon its use with Key Stage Two children, this belief was the catalyst for the project.
For the delivery of the weekly sessions, two members of the Forestry Commission Wales, Woodlands for Learning Team, Cathy Velmans and Sheena O’Leary joined Martin Cook, a senior lecturer in PGCE primary at Cardiff Metropolitan University. Another university lecturer and Forest School leader, Chantelle Haughton participated in the initial planning with the school and setting up of the project and attended some sessions as an ‘observer’. The project team shared reflections and collaborated on producing the final report.

The staff from the participating school, Meadowlane Primary, had attended a whole school INSET at Cardiff Metropolitan the previous academic year and were therefore aware of the Forest School approach. Following on from a series of Forest School programmes for Foundation Phase pupils provided by Chantelle Haughton, Cheryl Ellis and Mark Connolly in 2010, two teachers undertook Forest School level three leadership training and the school is now developing its school grounds to offer Forest School experiences to a wider range of pupils.

**Site – Queens Wood**

The urban university campus boasts a small section of ancient woodland running along its boundary. This area is a ‘hub’ for activities and has been managed and developed by the outdoor learning team at Cardiff Metropolitan University. Queens Wood is the base for *the outdoor learning centre* and is used for a range of outdoor learning initiatives and Forest School programmes for students, children and practitioners. The wooded area is sufficiently large and supports three log circles. This makes it possible for more than one group to use the wooded area at one time.

Over the duration of the Forest School programme the team had access to the twenty foot wide yurt, which is located near the edge of Queens Wood. The yurt is used as a meeting space and to store equipment. At the start of each session the children would gather at the yurt to help transport equipment to the log circle. Log circle (2) which is positioned furthest away from the buildings, was used throughout this project. This meant that the children walked quite some distance through the woods at the start of each session before reaching the circle, creating a true feeling of being in mature woodland.
The wooded area includes a range of species which supports a diverse eco system. During the project the children spotted many squirrels, green and great spotted woodpeckers and the sight of a fox running near the log circle caused great excitement. The area is bordered by a stream on one side and a grassed bank leading to the sports fields on the other. The log circle is well hidden and creates a sense of being deep in the middle of the woodland. The Queens Wood site differs from an open school field and so provides visiting children and staff with unique learning opportunities.
Project Overview

Aims of the project

The main aim was to reflect upon a prolonged Forest School programme. It is important to note that this report takes the shape of a reflective account and is not detailed sponsored research. The team delivered a weekly session on Monday afternoons throughout the year. Forest School programmes are often run from between six to twelve weeks. For this project the team was keen to reflect on experiences and practice over the changing seasons of the year within a woodland setting.

The team was also interested in observing the children and their forest school experiences, paying particular attention to their involvement and motivation. The team hoped that this work could add to the growing evidence base of Forest School practice and may provide ideas and recommendations for others looking to run extended Forest School programmes.

A multi-media approach for data collection

From the outset the project team invested time to think about creative and flexible ways to collect data and capture reflections which would fit in with the constraints of a small team working with the group one afternoon per week over the year. A range of methods were used to record the experiences which resulted in this final report.

Consent was gained at the start of the project from the head teacher, parents and the children for participation in the Forest School programme. The children featured in the observations shared were given pseudonyms to maintain anonymity.
Pre and post project teacher assessments

Before the project began the class teacher were asked to make an assessment of each child (see appendix 1 page 44). This was repeated at the end of the year. The pro-forma used originated from the Pentre Forest School report (Hughes and Jenner, 2006). It was initially thought that this form would capture the teachers’ pre and post perceptions of the children’s development. The project team was able to refer back to the initial assessments throughout the year.

Weekly field notes and after session reflections

Cathy, Sheena and Martin each kept field notes on five children. The Forest School leaders would meet at the end of each session to evaluate the delivery and discuss the children’s responses. Records for each child were kept by each leader and general observations were also recorded on these pro-formas. The field notes were most often recorded from memory after the session due to the hands-on work whilst out in the woods. From information gathered the team was also able to prepare the resources to be used for the next week, based on the children’s requests and interests stated. Cardiff Metropolitan students volunteering as helpers on the project were also invited to these evaluation meetings to listen to and share reflections. Their observations were added to the data.
Throughout the project the children took turns to use flip-cams, to create snapshots and mini-movies which captured items and moments of interest and they were also asked to think about what Forest School meant to them. The intention was to edit a short film encapsulating the children’s perceptions of Forest School to share at the end of the project with the children, parents and school staff.

Initiated by the class teacher (back at school), the children also wrote evaluations of Forest School at the end of the year which were given to the project team. A session was held at the school at the end of the project to look back on some of their experiences and to celebrate their learning.

Observations and journal notes

Chantelle, attended on a number of occasions as an observer aiming to capture different elements of the children’s Forest School experiences by noting activities on the spot. The children were aware that Chantelle was writing learning stories about their work in Forest School. She was
often sat hidden amongst the trees just watching and listening. Chantelle had not seen the teachers’ initial assessments and shared her reflections with the team without any background knowledge of the children. This proved to be a successful method of data gathering. However, time available for this was limited within the project. Chantelle and Martin hope to continue to extend the use of such observations in future projects they have planned.

Photographs

The project portfolio includes photos taken by the children, the project team and school staff.

Session plans

At the start of the programme a six week plan was drawn up. This included activities designed to introduce the children to the woodland and get them used to the idea of Forest School, such as exploring the site, thinking up Forest School rules and setting up a structure for the session.

Every session started and finished around the log circle. It was during this time that children discussed and shared ideas, telling the leaders what activities they had enjoyed and those they wanted to try. After a little welcome time at the log circle, leaders would let the children know what activities were on offer that day. The children could then choose from one of these or have free time. The children became aware of their boundaries and could explore and play within this area. This set up meant that the children could choose the level of input they felt they needed from the adults around them. Those who felt less secure in their environment could choose a more structured activity, whilst those with broader boundaries and more confidence could create their own challenges, and follow their interests.
From quite early on, making hot drinks and or food became part of the programme. This tended to be ready near the end of the session when the whole group would come back together to talk and share experiences. The children created their own ‘call’ to bring everyone back to the circle if needed. If at any point during the session they heard “All the leaves on the trees” being called, they had to reply “Bark, bark, bark” and return to the circle. The children very much enjoyed using this call and were extremely conscientious in following it.
After the first six sessions the structure became much freer. ‘Session plans included requests from children, cooking ideas and usually one or two long-term projects that the children could choose from. They were used as a guide and not necessarily followed due to the spontaneous thoughts and ideas coming from the children.

Managing risk

Every session and activity was risk assessed by the Forest School leader(s) and a file of procedures for the site was put together and shared with the school staff and student volunteers.

As the programme progressed, boundaries expanded. It was recognised by all that the children valued their free time and self-directed play. This risky play was managed through discussion with the children and the nurturing of positive self-regulation. The children managed their own behaviours. They were often observed policing invisible boundaries and played within earshot. Adults were available to loosely monitor the children, aware of where they were and wandering occasionally to find and talk to them.
Emerging findings from observations and field notes

Engagement with the Forest School approach appeared to continually increase as the programme progressed. Overall, a real change was noticed in the way in which the children interacted with the woodland around weeks 12-13. This was reflected through their choice of activities and how they engaged in them.

At the start of the programme the children were more inclined to choose activities that were being led or directed by the project staff. When given free time they often played cops and robbers. This changed noticeably across the year. Gradually, their choices leaned more towards self-directed activities. The children were seen or heard spending more time investigating, exploring and participating in imaginative activities and games. The ability to make their own decisions allowed them to follow their own interests and therefore become more absorbed in their learning experiences. This was detailed in the focussed observations made on a few individuals.

The point at which the children gained confidence to lead their learning experiences and become more fully engaged in the Forest School experience seemed to vary quite widely between individuals. It took much longer for some individuals to feel secure and comfortable in their surroundings, to the point that one boy had only just started to show more focus, engagement and inquisitiveness at the very end of the programme. Up to this point he had still relied very much on the adults to lead his learning experience.

The evaluation forms completed by the class teacher reflected a general perception of improvement in confidence and social skills as a result of the Forest School programme. However, it is difficult to draw any conclusive results as our aim was to simply reflect upon experience in practice as opposed to detailed analysis.
We have chosen to share a collage of observations, field notes, thoughts and discussion points with the intention of opening up our experiences as food for thought for other Forest School practitioners.
Observations

Children’s choices

The following extracts and vignettes reflect the essence and ethos of the project and highlight how the children’s voices were held at the heart of this Forest School experience.

Journal note extract January 2011

The activity menu for today was introduced by the leaders at the log circle at the start of the session:

- carving out steps on the pathway
- cooking
- rope ladder
- shelter building
- exploring

Exploring was instantly the most popular choice. A loud “yes” from the children echoed through the woods, they waved their hands excitedly when this idea was introduced.

Throughout the afternoon it was noted that the children mostly chose to stay away from the log circle area. Four of the children dipped in and out of the structured activities on offer around the circle. Most were exploring with adults supervising at a distance, often out of sight but within ear shot. A majority shift in the children’s interests from adult led activities to child-led exploration was clear to see today.

Some weekly observations

Joseph was identified as an interesting child to watch as although a very polite affable boy, he seemed to have trouble focusing and often jumped between activities not fully engaging in any. During the first term of the project Forest School leaders observed that he would choose mostly to work with the same two boys, but of that group he was least dominant. He always appeared to work well within the group but at that point had
not been observed leading the play. Often when the boys were enthusiastic or excited, Joseph’s ideas and opinions often seemed to go unheard.

“Joseph had listened to the instructions and knew they had to collect the pictures. He did try and tell the others – who were arguing over what they were collecting.” Week 6.

At the start of the programme Joseph did not appear to be very confident. Maybe this was due to the dominant roles of his peers, and it was wondered if this could be the reason that he often lost focus during an activity. Joseph would need reminding of instructions and got distracted easily.

“Joseph got distracted towards the end – came and went from activity (physically and in attention) quite a lot. He does not seem to focus for long periods of time on a task. He does not seem to get engrossed in a task.” Week 5.

Under the watch of the adults around the log circle, a lack of engagement in activities was frequently noted until week 11. However, observations during this time did also reflect that he was both a helpful and considerate child. For example he would often offer to carry equipment to the site, and always seemed willing to help others.

The learning story that follows was recorded on week 13, four weeks into the spring term. This marked what felt like a turning point for the Forest School programme. The children had begun to take ownership of the woodland and confidence in their own abilities seemed to increase. They were becoming more adventurous and able to direct and extend their learning experiences.

**A learning story 3rd February 2011**

**Scorpions in the stream**

Joseph often disappeared into the trees during sessions and the leaders wondered what he was choosing to do. Today Joseph was seen leading a small group of children into the stream. It seemed he was investing a lot of energy into leading other children into activities. This report was a
surprise to the other Forest School leaders as Joseph had not yet chosen to engage with any of the adult led activities over the last term and so it was pleasing to note this level of involvement in the child led exploration.

Joseph noticed me watching and announced, “We are looking for animals in the water”, as he walked to the water closely followed by Kevin. They slowly stepped into the shallow stream, silently they stooped down and carefully peeked into the water. There was no talking for forty seconds. Joseph turned to pick up a stick, he stirred the water. “Let’s go down here”, said Joseph. “This is a good place, I’ve seen some here before. Shh, don’t move, stay quiet a minute” he said to Kevin. The children moved out of sight but could still be heard, in amongst moments of silence.

K - “What do they look like?”  
J - “Shhh, or we won’t see them. There’s one”  
K - “Aww yeah, wow!”  
J - “Look, shhh, let’s try to catch it. Use your hands, like this, hold them together, scoop, carefully. Get your hands in, shhh”.  
K - “Errrr, what’s that? It’s gone back in, I just saw it, I nearly had it!”  
J - “It hides in the leaves to protect itself, be gentle.”

After a few minutes they moved back into sight.

K- “Miss, miss, look” pointing at his finger, carefully handling a tiny stream creature. “Err, err” giggling loudly he put it back in the water. J – “Get me out of here, there’s a white scorpion, come back and see. There’s thousands. They’re babies. Grab some. Err, err. We nearly had it then. They’re everywhere. What do they eat? They are wicked fast.”

Both with looks of concentration they stay stooped silently.

J- “I got it. I got it. I got it. I’m keeping it to show everyone later. Let’s go and get the others.”

They found an old pot nearby, the boys put some water in it and J carefully released the tiny creature. Later they took it back to log circle area to show some other children.

The observation notes on file continue; they returned to the stream later to release the creature and looked for more living in the stream.
As the programme progressed Joseph’s confidence and leadership skills seemed to grow, and with it his enthusiasm and energy. His listening skills improved but although he showed interest he could not always remember things, such as the names of leaves.

“All 3 boys in this team worked quickly and with energy to complete the task. I was surprised by how completely engaged and focused they were and how quickly they worked together. We went through the names of leaves as we collected and identified them, but when asked later only Jim remembered.”  Week 19.

“Joseph listened carefully to instructions and he and Jeff both made suggestions and came up with a way to mark the ground with arrows for the other group to follow.”  Week 21.

The class teacher’s end of programme comments also highlighted his growing confidence.

“Joseph was very interested in handling and using the tools and worked well when making things. He was very confident in his own abilities by the end of the programme. Joseph has become more confident as the year has gone on. He is now willing to express his wishes and is happier to make spoken contributions both in FS and within the classroom.”

Joseph’s learning stories illustrate one example of a slow and steady sense of progression. An increase in his confidence and motivation for participation was noted by all Forest School leaders and the class teacher. This case study highlights the significance of an extended Forest School experience across the academic year.

**More field note extracts and observations**

A field note extract and snapshots of two observations undertaken during Forest School sessions are featured here as two separate learning stories. These illustrate some of the play episodes, shaped by the children’s imaginations and the woodland environment.
Extract from observer’s journal notes 3rd February 2011

“It was interesting to think about the group dynamics. Today, a pattern started to emerge. It seemed that each time a small group of children was observed working away from the Forest School leaders, there was one child acting as the group leader, directing the focus of the other children. Initially, when observing Carl and Sheila I wondered if this was maybe related to gendered roles, but in another episode, Joseph took on a similar role with other boys and in other episodes the girls were also observed leading the boys several times. It seems then, that maybe children take turns to step into the role of mini-forest-school-leaders in the absence of grown-ups.

Watching from the trees; it felt very exciting to see the busy exploring and hidden learning happening. Quietly following their learning journeys almost felt like a step into their imaginary world. I was careful not to intrude, it felt like I was seeing authentic child-led learning in practice, which I imagine as the Forest School ethos we work towards facilitating. Their games were rich with language. Co-operation, communication and imagination could all be seen.

The children’s knowledge of this woodland space; the diversity and density of the flora and fauna and the wide scope of the ‘play boundaries’ all seemed very significant in their contribution to the rich child-led exploratory play I was seeing.”

Learning Story.

A journey to the secret hide-out

The opening talk at log circle 2 is complete and the children begin to break off to undertake their choices. The majority of the group move off down the hill in the direction of the main pathway and stream, the school teachers and student helpers follow. One of the children moves towards Cathy who is leading the fire lighting and cooking today. Another child follows Martin and excitedly assists moving the tool bag to the other side of the log circle and puts it down next to the saw horse. He chats to Martin about what they are going to do with the steps today. Carl and Sheila remain seated at the log circle and are seen talking quietly to each other. Clipboard in hand, I go to sit in a covered
spot where the children’s voices can be heard...

Carl and Sheila soon pass by. They are observed walking off excitedly in a different direction to the main group... I follow un-noticed... and soon I can hardly keep up!

Sheila quietly follows Carl. They choose not to take the pathway. They both begin to move effortlessly through the dense undergrowth. A steep slope prompts Carl to say, “Take care by here, it’s a bit slippy”. They keep moving, silently. I can’t see their faces, and they have not seen me yet, there’s no talking but I do sense excitement. They confidently climb over two fallen logs in the dip on the hill. One log was resting across the gap as high up as their shoulders. One at a time, they pull themselves up, putting one leg over, they rest on their tummies with their chins held up and flop over to the other side giggling. They move towards the bridge which crosses the stream. They are quite a bit ahead of me. I wonder what they will do as they reach this formal boundary. I see them stop, Sheila puts her hands on her hips and is saying something to Carl. I wonder if she is telling him to stop? I see them both turn around as if to look to see if anybody else is around and they catch a glimpse of me. I follow, happy it seems with a nod and thumbs up from me, they cross the bridge and leave the pathway again. Through uneven terrain we continue to move. They are now aware of me trailing them.

They seem to start to slow down. “It’s this way”, says Carl pointing and moving off. “Oooh careful of the holly”, says Sheila.... They move for a minute or so more, almost in the direction of log circle 1 (Which is quite a distance from log circle 2 and we have now been travelling for seven minutes).

“Here, we are, nothing’s been moved, that’s good.” They both call to me, “Miss, Miss. We made this secret place”, says Sheila. “It’s just one of the secret laboratories”, says Carl. Carl steps out of the lab which was a shady space, cleared out amongst some hazel and holly. Sticks had been carefully woven together for a make-shift roof. Little holes and ‘mud pies’ could be seen inside the ‘lab’, evidence of previous work at this spot.

Carl - “OK, let’s hide, umm, you hide... 1,2,3,4,5,6,7,8,9,10.” ..... Sheila hides on the other side of the circle. “Found you. Hide again”.....

The observation ends.
Carl’s and Sheila’s learning story captures how powerful child-led play can be and illustrates positive holistic child development resulting from their explorations. Valuable opportunities to extend their gross physical development, communication and creativity skills were experienced and observed.

**Learning story**

*To be heard but not seen – hiding games and secret codes.*

It is about one hour into the Forest School session. I am sitting on my fold-up note taking stool between some trees and bushes. No-one is taking any notice of me, although I think some of the children may know where I am. I cannot really see any of the children sat here but they are very close and I can hear them clearly...

I glimpse and hear Joseph move by, “Rock, paper, scissors - come on – whoever loses is on.”....

_ (another boy’s voice) “Rock, paper ... that’s cheating, be fair, count again”. A seeker is then fairly selected through another round and the hiders move off. The hiding game continues for a while, and during this, the seeker changes several times. “It’s time for Joseph to find us, we keep finding him but he’s never on it – Joseph you’re on it”, says one of the girls “But you haven’t been on it either, but Ok let’s change”, replies Joseph...

More of the group gather at the saving tree. They call out to the others, “We’re by the saving tree.” “OK, let’s move to the secret lab,” says a girl’s voice. “Sshhh, don’t forget to use the codes,” says Joseph. The group splits up.

From all different directions start to hear.... Tap, tap, tap and an occasional clap. I hear laughter. Wow! It is so exciting to hear their imaginations at work, what a treat to be the observer today.

A girl’s voice, “We should go further into the woods to hide, come on, remember tap, tap, tap – that’s the code.”... In the distance I hear “Miss, we are going that way,” one of the teachers responds “OK”....

The observation ends
As onlookers, the adults initially thought the group was simply playing a hide and seek game and may even have paused to ponder on the value of such activities. However, when taking a closer look into the children’s imaginary space, a rich fantasy landscape evolved. The saving tree, the secret laboratory, the tap-clap code all seemed to indicate the use of creative thought, negotiating skills and problem solving. These valuable outcomes could easily have been missed had the simple hide and seek game been curtailed.
Long term activities

Making a rope ladder

This was a popular suggestion as the children liked the idea of climbing up to higher tree branches. Making the ladder fell into several stages and involved the development of skills such as, tool use; measuring; problem solving and communication. Several children dipped in and out of the activity at different stages, and the ladder was made over 4 sessions.

Activity: Coppicing and sawing the wood to set lengths to make the rungs of the ladder
Children: Nia, Carys and Julie
Session: 13

Physical development: Having been given a demonstration on how to use the saws safely, the girls took it in turns to cut the rungs. They experimented with two types of saw, a bow saw and a Japanese saw. They all decided that they preferred the Japanese saw. Through practice and chatter they worked out what they felt was the best way to cut the hazel branches. Nia decided it was much quicker to saw as fast as she could making lots of little strokes. Interestingly the other girls did not agree and they started to discuss what was the best way? The other girls took their time and worked much more carefully and successfully, improving their technique through discussion and practice.
Language and communication, social and emotional development, self confidence and a sense of well being: The children chatted constantly throughout the exercise and were really good at supporting each other and working together to ensure the wood was cut to the correct length. One notable observation was that although Nia and Carys always worked together Julie had not yet been observed working with them. She came across as a shy child who did not tend to express her opinion much. As sessions progressed however, she became much more determined, ensuring that she was heard and that she had her turn. It was maybe due to this new confidence that the other girls included her and listened to her views.

Knowledge and understanding: Before selecting wood to cut, we discussed what type of tree would be suitable and identified the hazel tree.

“As we set out to find a hazel tree, Julie noticed some little flower shoots. One of them guessed that it might be a daffodil. When told it was a snowdrop Julie enquired what snowdrops were. She is becoming much more inquisitive and asking questions more often.”
Carys, who had listened very carefully to instructions was first to identify a suitable hazel branch.

**Activity: Drilling holes**  
**Children:** Jim and Dean  
**Session:** 15

**Physical skills, self-confidence, motivation and concentration:** Drilling holes in the ladder rungs with a hand drill was a real challenge and involved team work. Two boys took turns in drilling through the wood with some adult assistance, and although both found it difficult they were very determined. A sense of achievement and pleasure was reflected in their faces every time they got through a piece of wood.

“Dean came over to use the drill and bit to help make the rungs for the step ladder. He found it hard work but was quite determined, and appeared to really enjoy the challenge. He volunteered to do quite a few rungs, and seemed really pleased with himself each time a rung was completed.” Week 15.

**Activity: Threading rope through holes and knotting**  
**Children:** Carys and Jim  
**Session:** 15

**Physical skills, social skills, motivation and concentration:** Carys laid out the rungs at a distance she thought about right for a ladder. She then threaded the rope through each side with some assistance and put a double knot below each rung. Jim, who had been involved in the drilling came to work with her about halfway through to complete the task. Again these two children had not been observed previously working together, but it was at about this stage in the programme that the regular patterns of the children started changing. They both became quite absorbed in the task and excitement grew as the ladder took shape.

The rope ladder proved very popular, with requests from the children each session to put it up. It provided an opportunity for developing confidence with climbing, co-ordination and balance and teamwork skills.
“Towards the end of the session Joseph started climbing the rope ladder, but did not get far off the ground before retreating and calling over that it was wobbling. Jim held the sides for him while Mary gave him a push to get him off the ground. Nice bit of teamwork.” Week 22

Creating steps

The log circle used for the project was sited close to a quite severe slope which led eventually to the open grassed area. This slope was used initially by the children for sliding but they also were keen on the idea of creating some steps to climb to the flatter grassed area. The building of the steps became one of the long-term projects that children could dip into when they desired. The creation of the steps involved a range of skills; sawing wood, digging out steps, making and securing pegs. In order to make the work easier the suggestion of a saw horse was offered to the children and this was completed in week sixteen. One child in particular, Kevin, contributed significantly to the steps. He was always keen to saw, he would listen carefully to advice from the leaders and one pleasing factor was the way in which he used this same advice to help his friends cut successfully. He was heard saying phrases such as, “Let the saw do the work” and “Don’t push the saw, it cuts on the pull stroke”. Sheila, (a child who sometimes found listening to instructions difficult), also spent time working on the steps. Sheila enjoyed digging,
although her image of what steps should look like did not always conform to the norm and some intervention work was usually required, although she was always encouraged to help when she wished.

**The saw horse**

As the children’s ideas developed over the weeks, the need for more specialised equipment emerged. As the children were working on long-term projects such as the steps and rope ladder, the need for a saw horse was recognised.

A number of the children got involved in its construction. Branches were cut to length and sunk into the ground. They were tied securely in two cross shapes and another branch was tied across the supports. It was used regularly by the children and the leaders noted how the children would help each other by giving advice on how to saw effectively; advice that they had learnt in previous weeks.

**Into the swing of things – with a hammock!**

As one of the Forest School leaders had received a hammock for Christmas, it was thought that hanging it may make an interesting task
for the children. It actually turned out to provide a challenging problem-solving task as well as an opportunity for the children to relax and chat. The children had to first find two suitable trees from which to hang the hammock. This provided rich discussions as to the most suitable site. Their first idea was to site it quite a distance from the log circle, however, after lengthy debate; it was hung quite close to the log circle. It involved skills such as the use of appropriate knots, estimations as to the eventual height off the ground and a range of other problem-solving issues, not least the decision as to who would be first to use it! The hammock became a weekly favourite with the children regularly requesting it and it was interesting to see how they used it. To start with the children were a little boisterous, as it was seen as a good opportunity to swing back and forth. However, eventually the leaders noted that children would use it for relaxation and quiet contemplation. Sometimes we would note individuals gently swinging back and forth in the hammock, other times it would be used as a seat for two or more to sit and chat. On one occasion the head teacher was visiting and was seen spending a length of time happily chatting with children who were sitting on the hammock. For the price of a simple hammock, we would suggest that its worth in social interaction and reflection time would easily justify the small financial investment.
Pause for Thought

‘We love the woods...’

**Golden moments : discussion point**

Some of the children quickly adapted to the woodland surroundings and new experiences and so the practitioners also needed to adapt and develop their approach to include spontaneous child-led activities. Throughout the programme, golden moments were noticed and reflected upon. A simple definition of our golden moments would be the point at which something clicks for the child and suddenly their behaviour starts to change positively.

**For example children** would be observed for the first time, becoming more self-motivated to complete a task or maybe suggest a game for their peers to play and this behaviours would then continue. These golden moments noticed seemed to be constructive turning points for engagement and motivation.

**For example Forest School leaders** would reflect on how their leading style needed to be adapted to the changing needs and growing
confidence of the children.

We think it is really important for Forest School leaders, supporting adults and children to reflect and discuss such golden moments. We suggest that practitioners take time to pause and think about such changes that happen in their own Forest School programmes. Maybe consider:

- What golden moments do you see in your Forest School sessions?
- How and why were the positive turning points reached?

To see or not to see? : discussion point

With the openness of the woodlands, in the early stages of the programme, we often talked about the boundaries, especially related to the child-led exploration which was becoming increasingly popular. The confidence gained through early exploring experiences with adults empowered the children to lead their own explorations; this was inadvertent scaffolding. The Forest School team and school staff all agreed the value of freedom for the children to play, however, we think it is important for other Forest School leaders to consider:

- Should we allow children to move out of our sight? Why?
- How / when should we encourage the children to move out of sight of the log circle? Why?
- How do we feel about this as Forest School leaders?
- What are the perceived potential disadvantages and benefits?

If we return to Joseph’s experiences and think about what he gained when he was directing his own exploration and learning, it is possible to see positive outcomes. When in charge of his own agenda, Joseph developed a sense of curiosity and interest in the environment; an ability to make choices for himself and confidence to lead others imaginatively.

We assume that other quality learning experiences occurred for other children when out of sight. Investment in time for more detailed hidden observations would be valuable to capture similar developments. A
balance therefore needs to be found between focused activity and free play, allowing for Forest School leaders and supporting adults to undertake detailed observations. The informative learning stories in this report were captured in only a few minutes and provide a valuable insight.

Home or Away?

During the year, the school was unable to transport the children to the wooded area on two occasions. Rather than lose these sessions, the Forest School leaders agreed to undertake the sessions at the school grounds. The school is developing a Forest School area, close to a boundary fence. There are a number of young trees in this area, behind a fenced football pitch, which opens onto the school field. The leaders visited the school prior to the session to undertake an assessment of the area and to decide on the activities. There was sufficient wood to create a shelter and the school had given permission to light a Kelly kettle for hot chocolate, both of these activities were, at this stage of the programme, very familiar to the children. The main activity was an
orientation game where, in pairs, they set off to collect information from nine controls around the school grounds.

Reflections shared amongst the leaders highlighted how this session had a more structured feel to it and this sparked a debate as to whether the lack of a wooded area can impact upon the Forest School ethos. Even though some elements of the ethos can be promoted strongly during similar sessions to this one on a school ground, the lack of opportunities to travel and explore (a favourite choice of many of the group) may detract from that element of adventure instilled when in a natural wooded environment, possibly more so as the children get older.

**Ready or not?**

This question arose when thinking about children’s choices and their readiness to learn and develop new skills, knowledge and understanding. A question we considered was:

- Do the children avoid certain activities or ways of working, simply because they are not ready?

It was interesting to observe across the Forest School programme that some children never chose to participate in the focused activities. Another question that arose was:

- Should Forest School leaders intervene, provide scaffolding and try and extend their participation to help further development?
- Or is it more valuable to let them chose the experiences they feel ready for?

In response to this question we thought it may be helpful to reflect on the case studies included below.

**Case studies:**

**Thomas** has a very easy going nature and would participate in anything he was asked to do, but the Forest School leaders were often left wondering what he had been choosing to do and whether he had enjoyed the session.
“Very quiet. Is happy to participate in whatever we were doing, but can’t work out what makes him tick – what he would really like to do? Started making a frame but not bothered about finishing it. Did not want to take it home with him.” Week 4.

Interestingly, this also very much summarises the Forest School leaders overall impression of Thomas at the end of the programme. After session 11 there are very few observations of him as he never chose to do the focused activities on offer, instead most sessions for him were self-led.

In contrast, Huw chatted with adults throughout the first term but interacted very little with the other children. He stayed close to the log circle and when exploring tended to stick close to an adult. Huw seemed nervous of trying new things and over weeks remained unsure of how to entertain himself in the woodlands. His motor skills were fairly poor and he tended to display silly behaviour when he found things difficult. He often gave up easily and relied on 1:1 adult attention to engage him. One Forest School leader noted that “He does not seem to have stick-ability!”

This raises the question of interventions and when and if they should be used in Forest School.

Initial observations of both Thomas and Huw in Forest School were revealing and highlighted that they both had poor motor skills and differing issues with social interactions. If designing a programme to help develop their individual needs; explicit targets could have been focused on developing social skills with their peer group and building motor skills possibly through practical tasks and tool work. The teacher could take this perception of the children’s needs back into classroom and other contexts for learning.

Structured activities – tracking each other through the forest and tree identification.
Structured activities which ran throughout the programme included opportunities for development in both these areas. Sessions sometimes began with a team challenge or group task. However, during these tasks Huw seemed to tag along rather than engaging with the group or activity. When paired for an orienteering activity, he and his partner were the only ones to split up and give up without completing the task. Maybe this was a result of the pairing, or it could have been that he just was not ready to work in this way with other children.

Huw did choose to try out a variety of practical tasks throughout the programme, although maybe this related to Huw’s desire to remain in his comfort zone. Working with adults seemed to be the preference, rather than playing with his peers in an environment he was not quite comfortable in.

Thomas did not choose to use tools. He did not make a dagger, the saw horse, the rope ladder or the steps. He did very little cooking, and did not get involved in the arty or muddy activities. His play went mostly unobserved but at the very end of the programme he chatted to a Forest School leader as he returned to the bus and said several times how much he was going to miss Forest School. Clips from the video cam recorded by the children show Thomas engaging and participating quite naturally in games with other children.

So returning to the question of ready or not, should Thomas have been encouraged to do more practical activities? Should 1:1 help have been given or scaffolding provided in order to progress his motor skills, which were not that good? Or did he choose not to do them because he was not ready? Did his choices reflect areas that he felt comfortable working on? His choices enabled him to build up friendships and he appeared more confident and less shy by the end of the programme. This was observed by the class teacher and highlighted in her end of programme evaluation.

“Thomas is a polite, shy and quiet child. As a result of the Forest School programme Thomas has become happier to take risks. He is more confident in his own abilities and is contributing more frequently in group and class discussions. He is able to work confidently with his peers and has a capacity for humour. He has developed positive relationships with both children and adults on the Forest School programme.”
Huw’s choices allowed him to progress in a very different way, but were taken at his own pace, and again positive changes were observed.

The silly behaviour, for Huw, seemed to be his way of dealing with an inability to achieve a task, and therefore a way of avoiding failure and a knock to his self-confidence. However, it was noted that Huw gradually took on more practical tasks and became more persistent when trying to achieve.

“He chose to stay at the log circle and help when given the choice of free time. He knows how to set up the Kelly kettle now and was in fact directing Jim and Carys. He was also keen to get the water and prepare the Kelly kettle. With the flint he was very enthusiastic. He lit the cotton wool quicker than either of the others and wanted to know where he could buy one for himself”.

Week 21

The session, very close to the end of the programme was the first time Huw was seen to be fully engaged. Huw was now used to the routine of Forest School and appeared to be more comfortable in this environment. His self-confidence seemed to have increased slightly, and this was the first sign of him directing other children. When using the flint he became completely engrossed showing both concentration and motivation. His enthusiasm and delight when successful with the flint were clear.

It was noted by Forest School leaders that all the children tended to take on challenges when they were ready for them. When left to their own devices the children seemed to naturally seek to extend their individual boundaries and development. This could be linked to Maslow’s Hierarchy of Needs. It highlights that a child needs to have their basic physiological requirements fulfilled, and a sense of security and belonging before their self confidence and relationships with others can develop.
Structure vs choice

Making mud monsters

Collecting mud

Experience from this year-long programme supports Forest School practitioners’ views that Forest School works best with a high adult to child ratio as without this it is difficult to provide the flexibility needed to support children’s learning and development at different stages.

Looking at the examples in the previous case studies, it is clear that some children need routine in order to feel safe and are not able to progress before this sense of security is established. Huw only really began to engage fully by week 21 towards the end of the programme.

If looked at in terms of Maslow’s Hierarchy of Needs his basic biological and physiological needs were met and he always seemed dressed appropriately for the weather, but the woodland environment was so foreign to him that he stayed at the second level ‘safety needs’ for most of the programme. Background information on Huw revealed that he chose to spend a lot of his time playing computer games. Being in a wood therefore was a completely new experience for him and it took him a long time to adapt and feel secure. His confidence appeared to be increasing towards the finish of the programme. The Forest School leaders felt that given another year at Forest School, maybe Huw would have extended his social skills and acquired more of a sense of belonging in the group and outdoor learning environment.
Other children reached this stage much faster and were able to direct their own learning from quite early on. The majority showed a deeper engagement with their surroundings and the confidence to guide their own learning from around week 12-13.

Empowering children to progress at their own pace, by choosing experiences that are meaningful to them is fundamental in Forest School. Louv (2010, p.116) suggests that;

“Our lives may be more productive, but less inventive. In an effort to value and structure time, some of us, unintentionally may be killing dreamtime ... we need to find a better balance between organised activities, the pace of our children’s lives, and their experiences in nature”

Establishing a certain amount of structure during this year-long Forest School programme had its value and made certain children feel more secure, however, sufficient time and encouragement for self-directed learning and play in this context was invaluable. The experience of this year-long programme has emphasised that the children were often more involved, creative and excited in their learning experiences when they were making their own choices. Had the programme been more structured around adult-led activities, these valuable experiences could not have happened.

This is supported by Louv’s reflections on the study undertaken by Wells and Lekies (2006) which outlines that “Free play in nature is far more effective than mandatory, adult-organised activities in nature.” (Louv, 2010, p.150). If this is considered alongside the fact that some children take longer than others to feel safe enough in their surroundings to engage in free play, then the importance of running Forest School throughout the year or for as long as possible becomes clear.
The accepted truth?

This year-long project did not look to measure self-esteem, mainly due to the belief that we did not have in place a sufficiently robust measuring tool in order to report any findings with confidence. There was also a lively discussion between the team as to the worth of such a measure. There seems to be an ‘accepted truth’ that Forest School enhances self-esteem and it is supported by a number of pieces of recent sponsored research (Murray and O’Brien, 2004; Murray and O’Brien, 2005; Wavehill, 2010). Swarbrick, Eastwood and Tutton (2004) suggest that there are strong links between Forest School and self-esteem. However, when discussing teenagers’ involvement in a project in Oxfordshire, and the ‘gain in self-esteem’ for those youngsters, they concede that this was based upon ‘anecdotal evidence’ (2004: 143).

Whereas this report does not seek to dispute the assertion that Forest School enhances self-esteem, it does seek to debate this accepted truth and offers a possible alternative approach more easily measured, especially over a shorter Forest School programme. Maclellan (2005: 8) encapsulates the problem that we face,

The problem with trying to boost self-esteem directly is that we are pursuing the wrong strategy. Increases in self-esteem do not produce increases in their academic achievement (Marsh, 1990; Scheirer and Kraut, 1979; Skaalvik and Hagtvet, 1990). Indeed the evidence for a link between self-esteem and any given behaviour is so weak that self-esteem cannot be claimed either to cause behaviour or behavioural change (Seligman, 1990,1995).

Measuring something that describes the ‘self’ surely is measured most accurately by self-reports. Difficulties in validity when measuring self-esteem occur when others judge a person’s self-esteem. As Emler states when discussing this issue, “rather than judging how these other individuals actually felt about themselves the observers may have been estimating how they ought to feel about themselves”. He goes on to cast doubt over the accuracy of such an approach.

Given that, as we shall see, how people feel about themselves bears little relation to their objective qualities or accomplishments, there would then also be little agreement between self-evaluations and evaluations by observers.(2001: 10)
Four self-esteem scales account for the majority of published pieces of research (Emler, 2001), these being the Rosenberg Self-esteem Scale (RSE), the Coopersmith (1967) Self Esteem Inventory (SEI), The Tennessee Self Concept Scale (Fitts, 1965) and the Piers-Harris Children’s Self Concept Scale (Piers, 1969). It would be interesting to know how many studies linked to Forest School’s impact upon self-esteem have used any of these scales.

It would be wrong to underestimate the complex nature of accurately measuring self-esteem, especially when Macellan suggests that, ‘While the term, self-esteem has been used in both lay and professional parlance as though it had commonly agreed meaning, there is as yet no comprehensive theory to explain the wide variety of everyday situations in which self-esteem is implicated’ (2005: 8).

This report asks whether we are wise to place so much emphasis upon self-esteem, which in the opinions of some, has no significant impact upon achievement (Macelllan,2005; Marsh,1990; Scheirer and Kraut, 1979; Skaalvik and Hagtvet, 1990). Macellan argues that “More useful constructs would be those of self-concept and self-efficacy; both of which can be related directly to academic achievement.” (2005:7). Those undertaking training to become level three practitioners are expected to make judgements linked to children’s self-esteem and the Forest School programme over a period of six weeks. This is an extremely tall order and this next section offers a possible alternative, measuring self-efficacy.

Zimmerman (2000) distinguishes self-efficacy from self-esteem by explaining that self-efficacy “measures focus on performance capabilities rather than on personal qualities, such as one’s physical or psychological characteristics” (2000:83). It is more about how they judge their ability to complete a given task rather than “how they feel about themselves in general”. (2000: 83)

Bandura first put forward his theory of self-efficacy in 1977 and he describes it as “Beliefs in one’s capabilities to organise and execute the
courses of action required to produce given attainments” (1997:3). Bandura goes on to suggest that self-esteem alone is not sufficient for success, high self-efficacy is the key to achieving well (Bandura, 1997). Within the Forest School debate, measuring how well a child can use a tool at the beginning of a Forest School programme and how confident they are at using that tool by the end, is an achievable measure. Whether that success in using the tool actually impacts upon self-esteem is open to debate, as if success in a particular task is not important to an individual it will not impact upon their self-worth. As Maclellan asserts, “It is only if the perception is an important or salient one for the individual that it matters whether the judgement is good or bad” (2005:8). She develops this by stating that “It is possible to have low self-efficacy for a task but not in any way to feel devalued by this, because self-worth is not invested in the task” (2005:9). It is interesting to note that the most recent sponsored research project, ‘Evaluation of the Llanfair Forest School Project’ presented at the 10th Anniversary conference of Forest School in Wales, offered this finding under the justification for the benefits of self-esteem, “an increase in confidence in performing tasks and using tools as a result of their Forest School experience” (Forestry Commission Wales, 2011: 35). This would seem to be describing self-efficacy rather than self-esteem, and as Maclellan states, “Although often assumed to be the same, self-esteem and self-efficacy refer to different phenomena” (2005:9).

This section of our report does not come to any conclusions relating to self-esteem within Forest School, what it aims to do is open the debate and question the ways in which we measure success. We would suggest that on a Forest School programme measuring how self-efficacious participants become at specific tasks would be a much more accurate measure to undertake and to use as a justification for the worth of Forest School than measuring self-esteem, which can fluctuate over time, even from week to week.
Final thoughts

The long term contact with the woodland environment was considered to be the essential ingredient for successful self-directed and engaged learning experiences to take place.

The year-long programme provided learning opportunities at different levels for all project stakeholders. Running a year-long programme gave us the opportunity to celebrate good practice as well as generating more questions to be reflected on for future practice and research.

It should be noted that the reflections in this report represent the views of the project team in relation to their experience throughout the programme. They do not claim to reflect the views of other practitioners within Cardiff Metropolitan University or Forestry Commission Wales.
References

- Forestry Commission Wales, (2011) *10 Years of Forest School in Wales: A Celebration Conference* Welsh Government
### General comments/observations

<table>
<thead>
<tr>
<th>Proposition for change</th>
<th>Criteria</th>
<th></th>
<th>Criteria</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-esteem and self-confidence</strong></td>
<td>1. Happy in him/herself</td>
<td></td>
<td>8. Works well as part of a team</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Happy to make decisions</td>
<td></td>
<td>9. Has compassion for others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Feels secure, is not a worrier</td>
<td></td>
<td>10. Speaks up for oneself</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Keen to learn</td>
<td></td>
<td>11. Doesn’t worry what others thinks of him/her</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Confident and outgoing</td>
<td></td>
<td>12. Contributes to discussions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Happy to take risks</td>
<td></td>
<td>13. Wants to try new things</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. A leader rather than a follower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Social skills** | 1. Comes to FS willingly |  | 7. Takes part in discussions |  |
|                   | 2. Expresses wishes and preferences clearly |  | 8. Asserts own rights and needs appropriately |  |
|                   | 3. Has positive relations with most children within the class |  | 9. Makes spoken contributions to group/teamwork |  |
|                   | 4. Has capacity for humour |  | 10. Can negotiate with others |  |
|                   | 5. Approaches other positively |  | 11. Can wait to take his/her turn |  |
|                   | 6. Deals with failure/rebuffs well |  |  |  |
| **Total**         |  |  |  |  |

| **Language and communication** | 1. Willing and happy to share ideas and contribute to group discussions |  | 6. Communicates confidently with adults and peers |  |
|                               | 2. Holds eye contact with adults when communicating |  | 7. Works co-operatively with peers |  |
|                               | 3. Contributes and shares ideas with peers on practical issues/team activities |  | 8. Uses appropriate language for situations, choosing appropriate words |  |
|                               | 4. Is able to negotiate solutions |  | 9. Takes turn in speaking/using tools |  |
|                               | 5. Respects others’ views and thoughts |  |  |  |
| **Total**                    |  |  |  |  |

| **Motivation and concentration** | 1. Is keen and excited to go to Forest School |  | 4. Is interested in the woodland environment and is curious to learn and understand |  |
|                                  | 2. Asks a lot of questions |  | 5. Keen and eager to participate |  |
|                                  | 3. Can concentrate on task for long periods |  | 6. Takes time in perfecting/adding to task |  |
| **Total**                       |  |  |  |  |

| **Physical skills** | 1. Has good spatial awareness |  | 5. Has good physical stamina |  |
|                     | 2. Has good gross motor skills |  | 6. Deals well with terrain, obstacles |  |
|                     | 3. Has good fine motor skills |  | 7. Handles tools/equipment confidently |  |
|                     | 4. Moves in a confident and co-ordinated manner around FS site |  |  |  |
| **Total**           |  |  |  |  |

| **Knowledge and understanding** | Takes interest in the woodland surroundings |  | Knows, understands and respects FS rules |  |
|                                | Encourages others to respect environment |  | Encourages others to follow and respect FS rules |  |
|                                | Has respect for the environment |  |  |  |
| **Total**                     |  |  |  |  |