Integrating Outdoor Experience with Curricular Learning

Jen Howard

2015
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Acknowledgements
Undertaking this Fellowship has been an inspiring, rich and enjoyable experience and I'm sure the benefits of my travels will continue to unfold for years to come in both my professional and personal life. Thank you to all those who work at the Winston Churchill Memorial Trust, who had faith in me and my potential to bring about positive change near the beginning of my career. Thank you to my friends and colleagues Richard Irvine and Pattie Morris who supported me through my application process. Thanks to Malene Bendix, Mats Wejdmark and Aulikki Laine who were my initial points of contact in Denmark, Sweden and Finland, and who responded to my requests with such friendly helpfulness, and shared their knowledge and connections with me so openly. Thank you to all of the teachers and educators who welcomed me into their schools and centres, and answered all of my many questions, and to all the children I met who welcomed me into their classes and whose English was thankfully far better than my Danish, Finnish or Swedish. Thanks lastly to my partner Pete who encouraged me throughout the process of my Fellowship, and came with me to “carry the bags”.
Author Profile
I am a freelance Forest School Leader and Outdoor Learning Practitioner. For the past six years I have been working with primary schools to design and deliver outdoor experiences. My aim is to bring the primary school curriculum to life through hands-on, experiential outdoor learning. I have also worked as a Teaching Assistant in a primary school, where I developed a particular interest in how learning could become more practical and rooted in the real world.

Left, the author with a statue of Sir Winston Churchill taken in Churchillparken in Copenhagen.
**Executive Summary**

The purpose of my study trip was to find and observe examples of best practice in the field of outdoor learning. My aim was to see what outdoor learning looks like as an integrated and effective part of an education system, where the environment outside of the traditional classroom is used as a learning resource to complement the learning which takes place in the classroom. This could be either by using the place itself to provide the inspiration for learning, or taking learning outside the classroom for the purpose of making it more physical.

I had three questions in mind:

- How does outdoor experience combine or integrate with classroom learning?
- How are spaces outside the classroom used as an inspiration for learning, and what kinds of spaces are used?
- What role does outdoor learning have within the education system, i.e. is it perceived to be important, and what support does it receive?

**Key Recommendations**

- **Local Level Action**
  1. Design training and on-going support for class teachers with the aim of increasing teacher confidence outside the classroom.
  2. Provide outdoor learning equipment and resource lending service to local schools based on curriculum and study topic requirements.
  3. Provide match-making service between local people and organisations who could provide learning spaces, and schools, stimulating the community classroom.
  4. Use collaborative design process when providing outdoor experiences for schools as an external specialist, including preparatory and follow up work to be undertaken in the classroom either side of an outdoor experience. Encourage other activity providers to do the same.

- **National Level Action**
  1. Make local actions replicable nationwide, to be implemented by a network of outdoor learning providers.
  2. Conduct research to measure and evaluate the effects of outdoor learning on academic attainment in schools.
  3. Increase elements of outdoor learning training in initial teacher training programmes.
Background introduction to the project

Learning outside the classroom takes place in the UK in a variety of forms. These include Forest School programmes, outdoor sports, residential camps, activities in the school grounds, visits to museums and zoos, beaches and parks, school gardens and visits to other settings in the local community or further afield. The purpose and benefits of these experiences are also varied, some focus on raising self-esteem and confidence, some on social skills, communication and teamwork, others on physical development and health, and others are designed to fit in closely with classroom learning.

The sector of outdoor learning I have most experience of is Forest School. Forest School is defined as a long term and regular experience in a natural setting run by a qualified Forest School leader. Children are able to build a relationship with the setting, develop their creativity, confidence, independence and resilience, take appropriate risks, and the experience is centred around their own curiosity and motivations.

The Forest School movement has grown steadily in the UK over the last 15-20 years, after the idea was brought back from a study trip visiting Scandinavian Forest Kindergartens. The Forest School movement has been successful in raising awareness about the importance of taking children outside the classroom, and allowing a more creative, child-led kind of learning. Forest School has become something of a buzzword, but often the Forest School ethos, and the Forest School sessions the school wishes to see delivered are quite different things. In my experience, and that of other Forest School leaders, many schools want the curriculum delivered outside, with clear learning objectives set by the teacher for each lesson, rather than the child-led approach of the original ethos where learning takes place more organically based on the motivations and curiosity of the child.

This leaves a dilemma; Forest School in its original ethos has clear benefits for a child's social and emotional development. At the same time, taking the curriculum outdoors and making it more practical and physical is also vital, to learn within the context of the real world to increase meaning, to teach children practical skills, and to increase the level of physical activity children engage in. This raises the question, what other forms of learning outside the classroom could take place, building on the success of Forest School as a regular and ongoing, valued part of education. How could outdoor learning focus more directly on achieving curricular learning, or how could the learning be drawn out further from outdoor experiences and integrated with classroom learning? What are the barriers to this happening?

Lastly, the Forest Kindergartens in Scandinavia are for children up to seven years old, and in that stage of the Scandinavian education system there is no formal curriculum, therefore the child-led approach to learning isn’t in conflict with the teacher’s need to fulfil particular learning outcomes. I wondered how the outdoors continued to play a role in learning for children above the age of seven, once there are more specific learning goals to achieve.

With these questions in mind, I organised my study trip.
Aims and Purpose
My aims were to experience outdoor learning as an integrated and effective part of the school curriculum. I wanted to see how it could be delivered as a long term programme, in a sustainable manner in terms of finance and time out of the classroom. I wanted to see how the work carried out inside the classroom relates to what’s been experienced outside the classroom and how the learning is drawn out from the outdoor experiences.

The purpose for this investigation was to use the experience to re-shape my own practice as a freelance outdoor learning provider, to make my services more sustainable and effective for schools. This will be achieved through finding ways to support class teachers to take their classes out of the classroom more often, to increase the opportunities children have to learn in different styles and contexts, to increase the potential for integration with classroom learning and reduce the financial cost of learning outside the classroom (by buying in external providers).
Approach & Method
I visited three different Scandinavian countries with different purposes in mind for each country.

I chose to visit Denmark because Danish Kindergartens were the original inspiration for Forest School. I was aware that the Forest School approach was primarily used for children under 7, but that outdoor experience continued to play a key role in Danish education throughout the school years, with a much stronger focus on the curriculum.

I added Sweden to my itinerary after the advice given by a previous Fellow at the education seminar, which was to find a relevant conference to attend at the beginning of the trip for networking with key players in the field. Fortuitously, a biennial outdoor learning conference, which attracts delegates from across Scandinavia, was taking place in Sweden around the time of my travels.

Finally, I chose to visit Finland due to the articles I’d read about the amount of time Finnish school children spend outside the classroom, though it was hard to determine from the articles what form this outdoor time took. This desire was combined with knowledge of Finland’s high attainment rates as measured by the PISA rankings, particularly the small gap in achievements between the most and least academic students. I wondered whether this could be in part due to the wide ranging contexts outside the classroom within which they learn. I wanted to witness what role outdoor experience takes, and how it fits into the education system.

Once I’d identified the countries to visit, my approach to fulfilling the aims of my study was to arrange visits to witness a wide variety of styles of outdoor learning, and to analyse the common or key elements to their success. I also arranged visits to what I considered the support structures working behind teachers and outdoor learning providers to see the whole ecology of the outdoor learning field. This included visiting a teacher training course, a researcher, the heads of outdoor learning networks, and a policy maker from the Danish Ministry of Education. I identified which settings to visit based on recommendations by the leaders of networks of outdoor learning teachers in Denmark and Finland.

My method was to observe, join in, and ask as many questions as I could to determine what the key elements to success were of each of the settings I visited. I wrote a blog during my trip to communicate to my peers, in a digestible format, the experiences I had, and this was successful in inspiring and sparking discussions amongst my peers.

My blog articles can be viewed in full here: https://wildeducation.wordpress.com/
Findings
I will answer the three questions I had in mind, drawing on examples from across the range of settings I visited.

How does outdoor experience combine or integrate with classroom learning?

Udeskole, delivered by class teachers
In Denmark, the provision of regular learning outside the classroom, called Udeskole, is delivered largely by class teachers, rather than external specialists. Up until 2014, Udeskole was a bottom up movement, and the teachers involved were teaching outside using their own knowledge and enthusiasm. No extra qualification is required to teach outside, though there are support and idea exchange networks (Udeskolenet) and an organisation which puts out resources for teachers to use (Skoven I Skolen). Many teachers I spoke to feel they have a high level of autonomy and are trusted to teach each subject in the way they think will be best for their students. This trust gives teachers high levels of confidence, and they use this confidence to bring their own passions for the outdoors creatively into their teaching. This delivery by the class teachers is a key aspect in how to integrate outdoor experience and classroom learning, because outdoor practical learning becomes an integral part of the teachers planning. Teachers also have a much greater knowledge of exactly what the students already know, and what they are required to learn to fulfil the curriculum than an external provider could.

In the UK, the responsibility for regular outdoor learning is often passed on to an external provider. This makes it difficult for the outdoor experience to be truly integrated with classroom learning.

Research by Rickinson et al. (2004) investigated the barriers to teachers in the UK delivering outdoor learning such as field studies and nature visits, or outdoor learning in the school grounds. The main barriers identified were: fear about health and safety; teachers’ lack of confidence; curriculum requirements; lack of time, resources and support; and wider changes within and beyond the education sector.

Some of these barriers for teachers to take their class outdoors are different in the UK than Denmark because of cultural factors. For example, fears over health and safety in the UK mean teachers are keen to pass the responsibility for outdoor activities onto a provider who is qualified and insured, and will carry out the risk assessments and be liable. This risk aversion isn’t part of Danish culture, so teachers have the confidence to lead activities themselves if they have the skills. Secondly, teachers in the UK have less autonomy to adapt their teaching style to outdoor learning due to the culture of regular testing and inspections, which doesn’t exist in Denmark. This means there is more time pressure to deliver the curriculum and assess progress, and spending time developing ideas and resources for outdoor learning might not be prioritised.
The model for outdoor learning I witnessed in both Sophienborg school and Hareskov school was the In-Out-In approach. This means the lesson starts inside the classroom, where the teacher introduces the topic of study, assesses background knowledge and understanding of the students, and teaches some of the theory underpinning the topic. The class then move outside, either into the school grounds, or further afield in the community, and undertake a practical or physical element of their learning. The final part of the lesson is then conducted back in the classroom, where the learning from outside is related back to the theory from the start of the lesson, and therefore the learning is consolidated.

The outdoor activity may take the form of real world or place based learning, where the students are investigating their topic of study in relation to the specific place they are in. This is often undertaken by students working in small groups, with high levels of responsibility for their own learning.

For example, below left, students at Sophienborg school are using outdoor gym equipment to further their study of muscles, by sketching which muscles are exercised when using different pieces of equipment.

Below right, students in a Danish Culture class are in the local surroundings taking photos which they will then edit to imitate art from the Romantic Period, having learnt the key principles of Romantic art in the classroom.

Alternatively, the students may be engaged in study which is not specific to the place but which takes place outdoors for the sole purpose of making the learning more physical.
For example, below, students in an English class at Hareskov school are tasked with matching up English words on a shopping list with labelled pictures of the items situated at the other end of the playground. This means they have to remember and repeat the English word, and tell their team-mates what the word means in Danish. The students were learning new words, getting exercise and having fun. The Danish curriculum specifies pupils must do 45 minutes of physical activity every day throughout their school years, so combining this activity with other curricular subjects is a double use of time. This activity was a short section in the middle of a classroom lesson, where the English food names had been initially taught. The outdoor game gave students the chance to reinforce their knowledge, and come back to the classroom for the last part of the lesson ready to focus with re-oxygenated brains.

Another example of outdoor exercise combined with curricular learning is the use of Apps such as Find2Learn. Find2Learn is a GPS orienteering App where teachers can ‘pin’ a range of learning tasks to various locations around the school grounds or local community. Pupils then use their phones to access the pinned map, navigate to the points where the learning tasks will appear via the App’s messaging service, they work out the answers, and send them back to the teacher. Pupils are encouraged to run from pin to pin, so using Find2Learn combines physical activity, technology use, working together, and learning of whichever curricular subject the App is being utilised for.

The 2015 Blagrave Trust document *The Existing Evidence Base about the Effectiveness of Outdoor Learning* suggests that there are strong benefits associated with preparatory and follow up work either side of outdoor learning. This echoes Danish research which suggests this
In-Out-In format is more likely to result in learning taking place than spending the whole lesson outdoors, and the pupils are already in the frame of mind for learning when they go outside. This is an important point, given that the normal circumstances for being in the school grounds are playtimes. When outdoor learning is first introduced to a class, it can take an adjustment for children to realise they are expected to focus and learn even though they are outdoors, and to realise that learning is not confined to the classroom.

Denmark also has a wide range of opportunities for schools to engage with specialist providers such as the network of nature schools where classes from the local area come for day trips and residential. When outdoor experiences are provided by an external specialist, this In-Out-In approach can still be used to draw the most learning out of the experience. I visited Tårnby nature school where this approach is used. When teachers book their class in for a day at the nature school they are required to co-design the experience with the nature centre staff. This includes planning preparation and follow up work to be done in the classroom either side of their visit, which integrates the nature school experience with classroom learning and draws out as much learning from the experience as possible.

The Ofsted document *Outdoor Learning, how far should we go?* states that in the case of day visits and residential from Primary schools, responsibility for learning is usually given over to the specialist provider, thus making it difficult for effective integration with curricular learning. Many providers offer a set menu of experiences for teachers to choose from rather than actively including the teacher in co-designing the experience. When Forest School is provided by an external provider, ideally there is strong communication between the school staff and external provider, ensuring the experience is tailor made to suit the requirements of the class, but this isn’t always the case.

**Finnish Freedom**

The curriculum in Finland is currently undergoing reform and as part of this reform, children will be taught partly through phenomenon based learning where a topic relevant to the students is selected and analysed in a cross-disciplinary way, incorporating a variety of ‘subjects’. Part of the philosophy behind this is that in an age of easy access to knowledge via the Internet, it’s not what children are taught that is important, but how and why they are learning. Teaching through phenomena brings all learning into a real world context and shows pupils the relevance and meaning of what they are learning. Aulikki Laine who I visited from the LYKE network and Tikankontii Nature School was in the process of writing a book and training programme for teachers about how to teach this new phenomenon based curriculum through outdoor learning.

One of the main focuses of kindergartens across Scandinavia for children up to 7 is to allow the children to discover that learning happens continuously in the real world. By freely playing, the children are investigating, exploring, observing, mimicking, and through all of these actions, learning to learn entirely through their own motivation and developing a positive attitude towards learning.
Above, children at Koralli Pre-School in Helsinki are developing their maths skills by making repeating patterns using natural materials, not because they have been taught to, but because it’s a naturally occurring part of their play.

Teachers in Finland are afforded high levels of trust and responsibility, and freedom to teach in a range of ways. For many teachers, this means regular trips outside the classroom to ensure learning has meaning and is embedded in the real world. One teacher I spoke to from central Helsinki said she took her class on a trip out of school at least once a week. This could be to the public library, museum or gallery round the corner, or further afield using Helsinki’s free (for schools) public transport system. The class will always reflect back on what they’ve experienced back in the classroom, and use the trips for the basis of curricular tasks.

Learning about the world and how to live sustainably is foundational to the Finnish education system. As such, learning about the forests and nature - such a central part of Finnish culture - is prominent. Forest based learning is both part of the curriculum itself as well as being an environment used with the aim of teaching other curricular subjects such as literacy or maths.
Below left, children at Koralli Pre-School are learning about edible and poisonous berries, and below right, a class is learning about edible and poisonous fungi at Tikankontii Nature School in Tampere. Foraging is a big part of Finnish culture, and therefore learning these skills is relevant to the children, and important knowledge to keep them safe in the world around them.

One popular way of using the forest to teach the curriculum is the adoption of the Varga Nemenyi method for teaching maths to pre-schoolers, and grades 1 and 2. This is a method based on a Hungarian pedagogist which is taught to Finnish teachers as part of their teacher training, and is being used increasingly. The method uses everyday objects and experiences as catalysts for learning basic maths skills and concepts.

Here students at Koralli pre-school in Helsinki are using leaves, pine cones and egg boxes to learn number bonds, and follow instructions using directional language. Collecting the materials from the forest became part of the maths activity, and the children were having fun throughout the experience, as well as learning key skills. Even returning the materials to the forest was part of the
learning, though the children saw it as a game. For example the teacher called out “throw 3 pine cones over your left shoulder”, or “throw half of the remaining leaves with your right hand”. The Varga Nemenyi method encourages teachers to transform simple everyday actions like this into learning opportunities, and at the same time increase concentration levels and focus.

The freedom Finnish teachers have to interpret the curriculum and teach in styles that suit their classes far exceeds the freedom UK teachers are afforded. However, the UK government describes changes in the new curriculum as not telling teachers “how to teach” but concentrates on “the essential knowledge and skills every child should have” so that teachers “have the freedom to shape the curriculum to their pupils’ needs”, however this isn’t necessarily being felt on the ground yet.

There are so many factors which set the Finnish education system apart from the English education system, it’s harder to highlight specific good practice as an isolated factor, as without being a part of the whole, they become hard to achieve. The two factors which I feel make the most difference based on what I observed are small classes sizes (around 20 children) and the school starting age of 7.
How are spaces outside the classroom used as an inspiration for learning, and what kinds of spaces are used?

The tradition of using the community surrounding the school as an extended classroom spreads right across the Scandinavian nations. Often the boundary between school grounds and community is hazy with less obvious physical boundaries than in the UK. I witnessed several occasions where students were sent on tasks in small groups which involved them leaving the school grounds unsupervised, being given high levels of responsibility for their own learning and safety.

At the Ute är Inne Conference I attended in Linköping, Jes Aagaard described outdoor learning in the “Green, Blue and Grey spaces”. The green spaces are forests, parks, farms and gardens, the blue spaces are coasts, lakes and rivers, and the grey spaces are man-made industrial or social spaces. Below are examples of initiatives which are taking place in each of these types of spaces.

Green Spaces
Haver til Maver, which translates as Gardens to Tummies, teaches school children to grow, cook and eat organic vegetables through a hands on approach which sees the pupils take complete ownership of their learning experience, work together as a team, master new skills, gain confidence and have a lot of fun. The programme has been so successful that Haver til Maver has recently been awarded funding to roll out over the whole of Denmark through partner farms, gardens and school grounds. Their new cookery book (mitkokkeri.dk) will be given to every school child in Denmark. The municipality surrounding the original Krogerup farm has made visits to the farm a compulsory part of its curriculum and funds all the schools in the area to visit.

Classes attend the farm 8 times throughout the growing season. On their first visit in the spring each group of 4 children is allocated a 4m x 1m plot of land to transform into their own garden, which they plant up with vegetables and flowers, and nurture throughout the season. Each visit also includes a cooking session in the outdoor kitchen, where the class works in small groups to follow a recipe for a healthy meal using seasonal veg from the farm, light their own fire and prepare and cook the meal themselves, ready for the communal meal. The produce which they harvest is taken home to share with their families, where the children are encouraged to recreate the recipe they have learnt using their own vegetables, thus encouraging the healthy eating to continue at home. The Haver til Maver staff are professional chefs and growers, so the children respect that they are learning from real experts, and the class teachers attend along with the children and often use the experience to inspire maths, literacy or art work back in the classroom.
A similar scheme is the Copenhagen School Gardens, of which there are six located across the city. The gardens specialise in linking gardening to the school curriculum, from plant, soil and animal sciences, nutrition, maths and literacy for school starters, to physics, biology and maths for school leavers.

School gardens are also popular in the UK, and organisations like the RHS offer learning experiences for schools in their demonstration gardens, and also support schools to make gardens in their school grounds. The existence of these school gardens is often down to the enthusiasm and initiative of a single member of the school staff or a volunteer, and these gardens are often run as extra curricular clubs rather than as an integral part of learning curricular subjects.

**Blue Spaces**

Denmark, Finland and Sweden all have an abundance of water, in lakes or on the coast. This water is also used as a learning resource. In Finland I came across scientific study of algae on the Baltic Coast, and in Denmark the use of drones to photograph and measure the depth of a lake, music making using pupil-made instruments on a lake, a snorkeling lesson investigating marine life and water quality on the coast of Copenhagen, a study of seaweed and shells on the beach and a sea fishing trip to learn about nutrition and cooking.
Here students visiting the Meriharjun Nature School in Helsinki study algae growing on rocks on the edge of the Baltic Coast.

As previously mentioned, the concept of health and safety is much less apparent in Scandinavia than in the UK, and teachers are confident to lead many of these activities themselves. In the UK teachers (and society in general) are much more risk averse, and therefore more likely to buy in external providers for activities such as those described above, making them less affordable and unlikely to happen on a regular basis. There’s no such thing as a written risk assessment in Scandinavia.

**Grey Spaces**

Grey Spaces are man-made spaces in the local community, they could be of educational interest because of their physical built qualities, or their social or cultural qualities. These grey spaces include anywhere from the school playground, to graveyards, building sites, factories and zoos.

One teacher I spoke to took her class regularly to the nearby zoo for outdoor learning. The children had done a maths project there where they calculated the required weight and costs of food needed by each animal, measured the perimeter and calculated area of each of the
enclosures, monitored visitor numbers and displayed their data using graphs. They’d also learnt about anatomy by dissecting a pheasant, and produced art and poetry about their experiences.

There’s a scheme called Skolen I Virkeligheden which means ‘school in reality’ which matches up schools who want to take learning outside the classroom, with local businesses and organisations who can offer venues and lessons to classes in the real world. The type of visits are divided up into ten themes, for example culture, nature, professions, creativity and movement and the visits offered range from farms, building sites and libraries to visits to the local mayor’s office. This match-making service makes it really easy for teachers to find places to go which can link in with their classroom learning.

http://skolenivirkeligheden.dk/hovedstaden
What Role does Outdoor Learning play within the Education System and how is it supported?

Up until 2014, outdoor learning in Denmark was largely a grassroots initiative, led by enthusiastic teachers and nature leaders. The government has now taken on the cause of outdoor learning, and is actively encouraging its growth and development.

The Danish education reform of 2014 included several changes which act to support outdoor physical learning. The aim of the reform was to increase the academic attainment of the traditionally hard to reach pupils, such as boys and those from disadvantaged backgrounds.

Two of the changes relevant to outdoor learning are:

- Increase in amount of physical activity requirements to 45 minutes every day for all school pupils.
- Introduction of skill requirements in equal measure to knowledge requirements. I.e. For everything a child learns theoretically, they also have to learn to DO something.

Outdoor learning is a natural fit for achieving both of these requirements, and therefore the government has provided support for its development in the following ways.

Research

The Danish government has invested £2.2million in research and development of Udeskole. There are PhD students at the Steno Diabetes Centre outside Copenhagen researching the impacts of Udeskole on children in terms of physical movement, development and exercise, curricular learning, social relationships, teaching styles and mental health of both pupils and teachers. The research is comparing parallel classes from the same schools, where one class is learning outside the classroom for at least five hours each week, and the other class learns within the classroom environment. This research is taking place at sixteen schools from across the country, and there are also students studying the effects of Udeskole on children with and without ADHD.

Sophienborg school was taking part in a study which documented the effectiveness of learning outside. During the initial indoor introduction and theory teaching, children wrote their notes in a blue pen, and any details they added after coming in from the outdoor learning were noted in a green pen. This allowed teachers to analyse to what extent the outdoor experience had contributed to the levels of knowledge and understanding of the pupils.

The government has also funded the development of a network of Udeskole Demonstration Schools across Denmark, which are receiving support to develop Udeskole practices within their own schools, and then to provide training and consultancy to other schools. Some of the demonstration schools already have teachers who are highly experienced in teaching outdoors, others are new to the concept and keen to develop their skills. In addition to the Demonstration
Schools, there is also a network of outdoor learning consultants to support schools develop outdoor learning.

In the document commissioned by the UK organisation The Blagrave Trust, *The Existing Evidence Base about the Effectiveness of Outdoor Learning* (2015), a lack of research into the ability of outdoor learning to raise academic attainment is stated as one of factors restricting the growth of effective outdoor learning.

Similarly, in the Ofsted document, ‘Learning Outside the classroom, how far should you go?’, the lack of detailed evaluation methods used “meant that schools and colleges were not able to assess accurately the strengths and weaknesses of their provision outside the classroom or to bring about necessary improvements”.

Schools have to be able to prove the effectiveness of all of the interventions they provide, to justify the financial and time investments. Further research, or development of an assessment tool which teachers could easily use to determine the effectiveness of their outdoor learning would help Outdoor Learning prove its value within our system of testing and assessment.

**Practical Curriculum**

Changes to the curriculum brought about in the 2014 reform increase the level of practical skill pupils are required to achieve. For each learning goal set by the government, there is a skill element as well as a knowledge element, this embeds learning further into the real world.

Including these skills automatically makes the learning more practical, and much of this practical learning is suited to being taught outside the classroom. For example, as part of learning about the anatomy of animals, pupils are required to dissect something. This can either be done at school if the teacher has the skills, or it can be delivered by an external specialist, at a nature school or zoo. External providers are becoming increasingly aware of the curricular needs of the school, and adapting their services to include a diverse range of ways to serve the schools.

**Skoven I Skolen and Udeskolenet**

Skoven I Skolen is a website based project run by a partnership of five organisations: the Nature Agency, the Danish Forest Association, the Danish Outdoor Council, the Ministry of Education and the Wood Initiative. Skoven I Skolen supports teachers to teach outside the classroom (not exclusively in forests despite project partners). This support is in the form of seasonal lesson and activity ideas linked to the curriculum, free resources, research articles and blogs describing teachers’ experiences of outdoor teaching. The content is crowdsourced from a wide range of different nature and outdoor activity organisations, teachers, nature guides, teacher educators, researchers and students, and is a one stop shop for outdoor learning ideas. Skoven I Skolen claims over 100,000 website visits annually, it’s an easy and quick reference point for teachers wanting to deliver outdoor learning.
There are lots of organisations in the UK which produce their own resources for outdoor learning, but none that provide such a comprehensive service linked specifically to the curriculum.

Udeskolenet is a branch of Skoven I Skolen which is a membership organisation which acts to lobby the government about outdoor learning, and also holds biannual meetings where members share ideas and skills, form collaborations between organisations, and discuss policy and practice.

In the UK there are various outdoor learning membership organisations, such as the Forest School Association and the Institute of Outdoor Learning, but none whose main focus is curricular outdoor learning for teachers.
Conclusions
I feel I managed to organise visits which allowed me to develop a good overview of what makes outdoor learning in Scandinavia a success in terms of integration with curricular studies. As well as finding the answers to my questions, I also found the answers to many other questions, and found more questions too, which has re-awakened my desire to learn more.

As well as writing this report, I feel I could equally write reports about the role of trust and responsibility in Scandinavian culture and how it influences education, and also the effects on the development of curiosity and self motivation of having a play based education system for children up to 7 years old. In time I will be writing about these subjects and publishing on my blog and elsewhere.
Recommendations

As already mentioned, research conducted by Rickinson et al (2004) identified the biggest barriers to teachers in the UK conducting outdoor learning with their classes as: fear about health and safety; teachers’ lack of confidence; curriculum requirements; lack of time, resources and support; and wider changes within and beyond the education sector. These factors echo what I experienced myself in Scandinavia to be some of the most obvious differences between outdoor learning and teaching there and in the UK. Therefore my recommendations aim to reduce some of these barriers, first with actions I can carry out myself and encourage my peers to do on a local level, and secondly, ways to remove these barriers on a national scale.

Local Level Action

- Design training and on-going support for class teachers with the aim of increasing teacher confidence outside the classroom.

This could be in the form of training courses aimed at teachers grouped by Key Stages across learning communities for using outdoor learning for specific curricular subjects. Alternatively, schools could benefit from training courses designed specifically with their grounds and surrounding community in mind. This would allow teachers to become aware of the assets their school already has in terms of spaces and natural resources, and would take into account the specific topics and themes the school is working with. This could be an on-going consultancy and mentoring relationship where schools sign up to the service for a year and receive training, ideas and resources (see next recommendation) specific to their requirements.

- Provide outdoor learning equipment and resource lending service to local schools based on curriculum and study topic requirements.

It's already possible for schools to borrow topic specific library books and science equipment from their county council or other local schools to save money. I propose the development of a loan service which lends outdoor learning resources, equipment and accompanying instructions and lesson plans to schools, based on their topic of study. Often resources used for outdoor learning are not ‘off the shelf’ items, and teachers may find budgeting for items not regularly used, or making time to collect materials and develop these resources themselves difficult, or not have access to materials or tools needed to make them (lack of time, resources and support are all mentioned in Rickinson’s barriers). This loan service could combine with the training courses and mentoring mentioned above, and act as ongoing support for teachers to increase the amount of their teaching time they spend outdoors, without causing a significant increase in workload for preparing resources. This loan service could be developed by me, or another forest school or outdoor learning leader, and trialled locally before being rolled out nationally as a service provided by County Councils.
• Provide match-making service between local people and organisations who could provide learning spaces, and schools, stimulating the community classroom.

This would involve inviting local organisations to join the scheme, and offering them training about how to engage with schools, and writing risk assessments which schools could download for each visit. In Denmark, the format School in Reality utilises, a website with visits displayed under different themes, works well (http://skolenivirkeligheden.dk/hovedstaden). Once initial trials had taken place, the work of setting this up could also come under the role of an outdoor learning consultant.

• Use collaborative design process when providing outdoor experiences for schools as an external specialist, including preparatory and follow up work to be undertaken in the classroom either side of an outdoor experience. Encourage other activity providers to do the same.

I already use a collaborative design process to a certain extent as I respond to schools requests rather than offer specific learning experiences. The development of follow up and preparatory work will begin within the next 3 months, and I will share the importance of these with other practitioners.

National Level Action

• Make local actions replicable nationwide, to be implemented by a network of outdoor learning providers.

All of the ideas above could be replicated throughout the country by a network of outdoor learning practitioners, ideas could be shared at national outdoor learning conferences such as the Forest School Association, Council for Learning Outside the Classroom or Institute of Outdoor Learning conferences.

• Conduct research to measure and evaluate the effects of outdoor learning on academic attainment in schools.

Firstly, more research is needed into the specific outcomes of outdoor learning on curricular attainment to increase the evidence base. This in turn could lead to further funding for posts such as outdoor learning consultants within County or District Councils.

Secondly, the development of a simple assessment tool such as the colour coding used by Sophienborg school would help teachers to assess the impact of and justify time spent outside the classroom. Researchers could develop and trial a range of these tools for teachers to use.

• Include more elements of outdoor learning training in initial teacher training programmes.
As well as CPD courses for teachers, outdoor learning needs to be integral to initial teacher training. If teachers were given adequate training on outdoor learning and managing risk at the start of their careers, they would have higher levels of confidence. It takes more confidence for teachers to introduce a type of teaching which is moving away from what they’ve been taught than it does to carry out something that was an integral part of initial training.
Appendix 1 - List of Organisations Visited

**Denmark:**

Haver til Maver Krogerup Farm - [http://havertilmaver.dk/](http://havertilmaver.dk/)

Udeskolenet, including meeting Rasmus Frederiksen from the Ministry of Education - [http://www.skoven-i-skolen.dk/%C3%A6ring-i-udeskole](http://www.skoven-i-skolen.dk/%C3%A6ring-i-udeskole)

Sophienborg School - [http://www.sophienborg.dk/](http://www.sophienborg.dk/)


Skoven I Skolen - [http://www.skoven-i-skolen.dk/](http://www.skoven-i-skolen.dk/)

Hareskov School - [http://www.hareskovskole.dk/](http://www.hareskovskole.dk/)

Steno Diabetes Research Centre, meeting Peter Bentsen - [https://steno.dk/en/forskere_areapage_lvl2/researchprofiles/peter_bentsen](https://steno.dk/en/forskere_areapage_lvl2/researchprofiles/peter_bentsen)

Sorø Forest Kindergarten - [http://www.skovbh.dk/](http://www.skovbh.dk/)

Stockholmsgave Kindergarten, Copenhagen - [http://stockholmsgavecentrum.kbhbarn.kk.dk/FrontEnd.aspx?id=643403](http://stockholmsgavecentrum.kbhbarn.kk.dk/FrontEnd.aspx?id=643403)

**Sweden:**


**Finland:**


Mahnala Environmental Pre-School - http://www.hameenkyro.fi/palvelut/kasvatus-ja-opetus/esiopetus/


LYKE network - http://www.luontokoulut.fi/

Appendix 2 - References

OFSTED, 2008, Outdoor Learning, how far should we go?

Rickinson et al, 2004 A review of research on Outdoor Learning

Fiennes et al, 2015. Commissioned by the Blagrave Trust. The Existing Evidence Base about the Effectiveness of Outdoor Learning