

# CHANGE THE GROUNDS

**LEARNING BEYOND THE CLASSROOM**

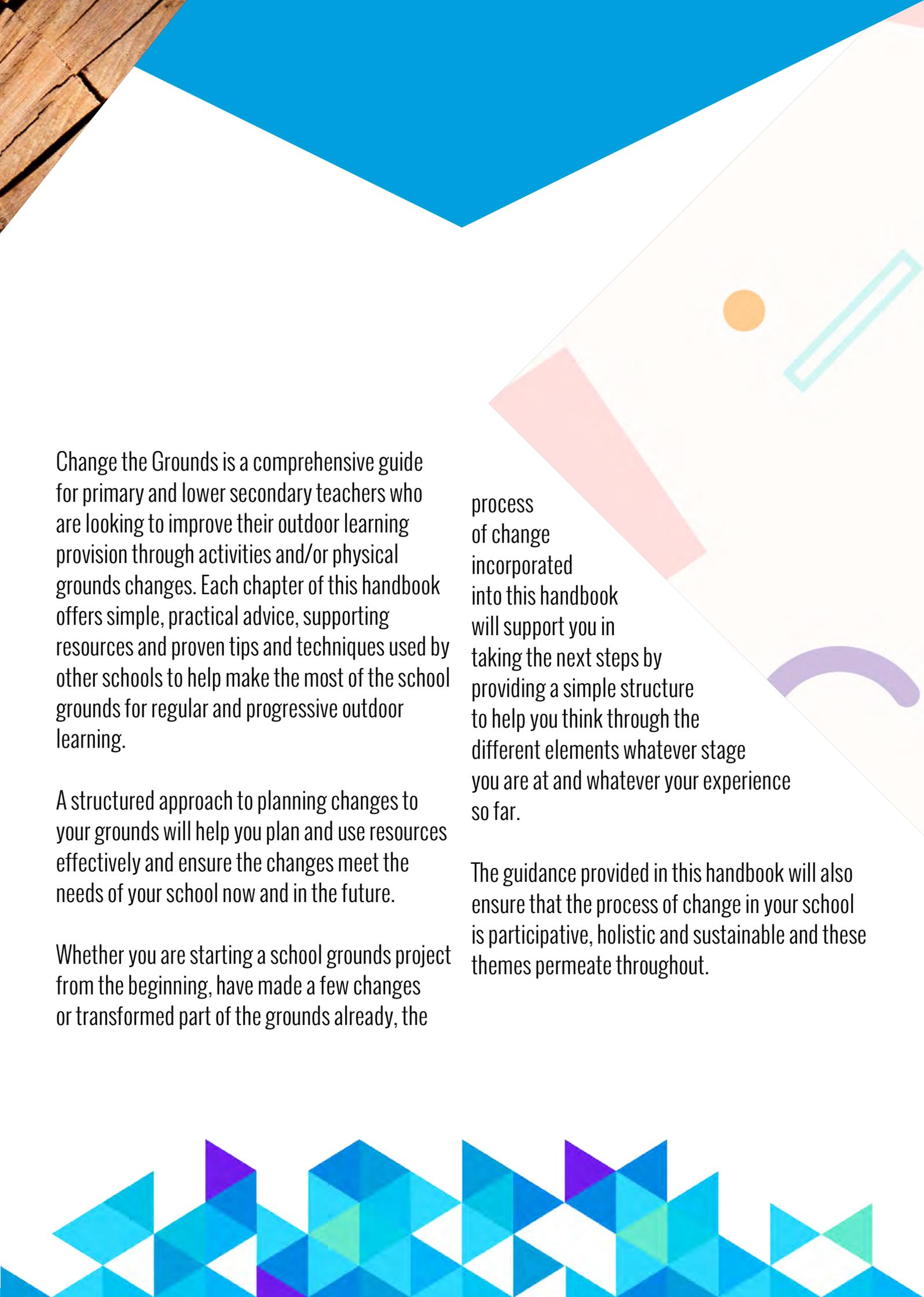
# Introduction

Are you unsure about how to take learning beyond the classroom and into the outdoors?

Perhaps you are more experienced, but the school grounds are uninspiring and you are looking for some simple grounds changes to create a more engaging space for learning outdoors?

If the answer to either of these questions is yes, then this handbook and the associated resources are for you!





Change the Grounds is a comprehensive guide for primary and lower secondary teachers who are looking to improve their outdoor learning provision through activities and/or physical grounds changes. Each chapter of this handbook offers simple, practical advice, supporting resources and proven tips and techniques used by other schools to help make the most of the school grounds for regular and progressive outdoor learning.

A structured approach to planning changes to your grounds will help you plan and use resources effectively and ensure the changes meet the needs of your school now and in the future.

Whether you are starting a school grounds project from the beginning, have made a few changes or transformed part of the grounds already, the

process of change incorporated into this handbook will support you in taking the next steps by providing a simple structure to help you think through the different elements whatever stage you are at and whatever your experience so far.

The guidance provided in this handbook will also ensure that the process of change in your school is participative, holistic and sustainable and these themes permeate throughout.

# Project



## CHANGE THE GROUNDS

**Parts 1-3** of this resource focus on the school grounds now; looking at the opportunities in the existing space; identifying and overcoming common obstacles to taking learning outdoors and simple activity ideas and suggestions to make the most of the spaces available now.

**Part 1** focuses on helping you to evaluate your current school grounds provision in relation to outdoor learning and highlights useful elements to support outdoor learning.

**Part 2** looks at how to negotiate the common obstacles to meaningful outdoor learning.

**Part 3** provides inspiration for the use of existing outdoor features to teach the curriculum outdoors before making any changes.

**Parts 4-7** of this resource focus on using a structured approach to plan, implement and sustain low cost improvements to your grounds to support outdoor learning.

**Part 4** supports you in the process of planning for grounds change.

**Parts 5 and 6** empower you with examples of basic and more complex grounds changes which will support good quality outdoor teaching and learning.

**Part 7** looks at how to maintain a culture of regular, sustainable use of the outdoor space for the benefit of all learners, staff, the community and the environment.

The handbook content is also supported by a series of practical online modules and a bank of linked learning activities. The following logos will appear at relevant points within the text to direct you to the appropriate resource.



This icon indicates that there is a supporting online module.



This icon indicates that a detailed learning activity is available to download from the online activity bank.

# THE RATIONALE

Learning outdoors offers a wide range of benefits to all children and young people. It provides access to fresh air which encourages sustained pupil concentration levels and their alertness as well as supporting the development of a healthy immune system. Outdoor learning facilitates the opportunity to be physical and in turn develop physical literacy. Increased physicality has wide reaching benefits for the current generation and raised activity levels can lead to pupils being more settled back in class. There is also evidence to suggest that children's learning can be more powerful if they are active. Alvarez-Bueno et al. (2017)

Social interaction is enhanced when pupils and staff work together outdoors. Not only does it foster a more relaxed rapport between teachers and learners but it is also a chance for different individuals to excel by supporting different learning styles. It can be particularly beneficial to those with additional support needs such as ADHD. (Kuo, F.E., & Faber Taylor, A. 2004.) It presents opportunities to experience risk and challenge and build resilience. Children need the chance to judge risk for themselves in order to develop important skills for life and the school grounds provide a controlled environment in which pupils can learn about their limitations and build their resilience.

Learning in the grounds can also provide a basis for developing a sense of place as school grounds are universal, they are easily accessible and time spent there can be regular.

The exposure to a wealth of natural resources, spaces and physical phenomena is a rich context for spontaneous (and planned) real life learning. More so than ever children's connection with nature should not be underestimated. It is only if they care, that they will value and preserve it. (Soga et al., 2016) Equally the simple pleasures and contentment that nature can offer in terms of good mental health and wellbeing may be more critical to this generation than any previous to them. "Nature buffers the impact of life stress on children and helps them deal with adversity" Wells 2003 cited by Randy White 2004. There are fewer opportunities for many children to get outside nowadays due to screen time culture, reduced roaming because of perceived threats and a lack of good quality local green spaces.

Above all outdoor learning is fun. It stimulates all of the senses which in turn provokes a more engaging learning experience and even better memory formation as memories are so closely linked to emotion. At this point, it is important to mention the value of play. Play and learning are not mutually exclusive

in fact; children learn much more of the informal curriculum through their play experiences. (Randy White, 2004) However, not all play experiences are equal. Grounds that are conducive to a positive play experience will support the development of the whole child during their leisure time and the positive impact of this will be witnessed in class through pupils with better learning capacity, improved social skills, problem solving, and resilience.

Although this handbook focuses specifically upon outdoor learning any grounds changes should not be implemented without also considering their impact upon the children's play experience.

Globally there is a growing wealth of evidence in support of taking children's learning outside the classroom. Every Experience Matters Karen Malone (2008) reviewed over 100 studies drawing on research from around the globe identifying the positive impact of learning outside the classroom on children's whole development.

Educational policy across the UK recognises the need for regular access to stimulating outdoor learning environments as part of a holistic enriching educational experience.

"Outdoors is often a more effective place to learn than indoors." (Curriculum for Excellence through Outdoor Learning)

"Outdoor learning is identified within the GTCS professional standards as an aspect of good teaching

practice." (General Teaching Council of Scotland.)

"Outdoor education in England is considered as making a positive contribution to students' physical, personal and social development and is a valuable aspect of learning outside the classroom reaching beyond the formal curriculum." (The National curriculum in England.)

In Germany, Education for Sustainable Development is an important political agenda at a national level and it is implemented in some federal curriculums.

There are also some pilot projects that promote outdoor learning, for example Draussen Schule. These projects exist on a regional level but they are subject to funding. There are, however, motivated and curious staff across Germany finding ways to enrich learning by taking lessons outdoors.



# A PARTNERSHIP

This handbook is the product of a partnership between organisations in Slovakia, Germany and the UK. These organisations are united by their desire to see children's learning and development flourish through the use of outdoor spaces and each brings their own expertise to the suite of resources.

## Learning through Landscapes

[www.ltl.org.uk](http://www.ltl.org.uk)

Learning through Landscapes is the UK charity dedicated to enhancing outdoor learning and play for children. Their vision is that every child benefits from stimulating outdoor learning and play in their education. We aim to enable children to connect with nature, be more active, be more engaged with their learning, develop their social skills and have fun!

Where possible we encourage young people to have a say in the way their grounds are used and improved. As a result they learn to create and look after something valuable; their self-esteem grows and their behaviour improves, along with their potential to learn and achieve.

We do this through three avenues:

- Advocating the benefits of outdoor learning and play at school and pre-school.
- Inspiring and enabling the design and development of outdoor environments to support children's development.
- Inspiring and enabling teachers and early year's practitioners to develop the

confidence, ideas and skills they need to make better use of outdoor spaces.

This approach is guided by three core values which guide everything we do. We believe that we can achieve the greatest impact by:

- Inspiring by sharing good practice and creative ideas.
- Enabling schools and settings to engage their children to find solutions to their own needs.
- Influencing the policy environment within which schools and settings operate.

The 'Process of Change' recommended by Learning through Landscapes is based on over twenty years experience of working with schools supporting outdoor learning across all stages and sustainable grounds improvements.



Learning  
through  
Landscapes

## **Strom zivota**

<https://en.stromzivota.sk>

Strom zivota Slovakia is a non Governmental, not for profit organisation that has been active in the field of environmental education and cultural heritage preservation in Slovakia for nearly 35 years. The main target group of the organisation are children in nurseries, elementary school children and youth in general. The organisation creates a variety of programmes focused on environmental education at all levels and have worked with 150 nurseries and schools nationwide. Environmental outdoor education is a compulsory cross subject topic in Slovakia, but currently there is limited material available to support schools with taking learning outdoors.

With a focus on integration of environmental studies into education, experience of developing materials for teachers, organising training for teachers and publishing a nature focussed magazine for pre-school children, the current internal network of 185 nurseries and

primary schools contribute to quality management of the project and dissemination of resources.

**STROM ŽIVOTA**<sup>®</sup>



## **INAK**

[www.trochuinak.sk](http://www.trochuinak.sk)

INAK Slovakia is an NGO that tries to do things differently, focussing on innovative approaches and creative methods in the educational process and working with children, young people and adults. Our projects enhance lifelong learning and help to develop learners' key competences. We try to implement ideas and bring them into practice through local, national and international projects usually in partnership with a variety of institutions.



## The Independent Institute for Environmental Issues (UfU)

[www.ufu.de/en](http://www.ufu.de/en)

UfU is a scientific institute and a citizen-based organisation. The five main goals that UfU has set are:

- Adhering to limited natural resources
- The decarbonisation of society
- More democracy through more participation
- Social justice
- A sustainable economy that subscribes to these principles

Approximately thirty employees are currently working at UfU. In addition, there is regular cooperation with freelance collaborators.

UfU mainly works on research assignments and model projects financed by federal ministries, federal states and municipalities as well as foundations. In addition to its scientific activities, the institute initiates and engages in local and international projects and networks.

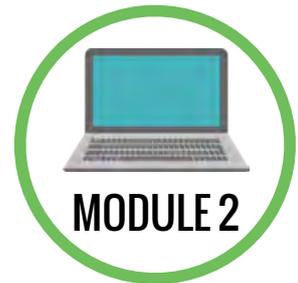
UfU regularly publishes the results of its work as studies, proceedings, educational material and handbooks as well as in papers and journals.

# 1) REVIEWING CURRENT OPPORTUNITIES AVAILABLE IN THE SCHOOL GROUNDS NOW

This first section of the handbook focuses on evaluating your current school grounds in relation to outdoor learning in terms of staff

attitude, what resources are currently available to support learning outdoors and what (if any) areas are currently used and why.

By the end of this section you will have:



- Completed your school grounds audit.
- Gathered information to gain a better understanding of how the school grounds currently support, or don't support, children's learning outdoors.
- Obtained a base plan (or digital map) showing the footprint of the school building and the surrounding grounds, as a useful focus for discussion about the space, the current resources available and potential changes to help support learning outdoors. For more information regarding how to make the best use of this plan refer to section four of this handbook.

School grounds vary greatly in their scale and diversity. The challenge therefore is to find ways to make the most of each school's grounds for exploration, discovery, learning and play for children of all ages no matter what the space.

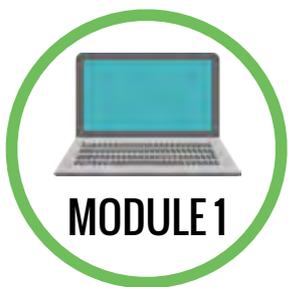
To make a lasting, sustainable impact

on creating a rich learning environment outdoors that can be used on a regular basis throughout the year, staff will need support to reflect upon their current provision and practice. From the beginning focus on identifying the strengths, weaknesses and potential learning opportunities with

regards to learning outdoors in the school grounds now; identify existing barriers to usage and how these can be overcome. As part of this process you may identify simple changes to the grounds that will help support your aim of enhancing learning opportunities outdoors. Parts 4-7 of this resource will

support you in planning, implementing and sustaining these changes.

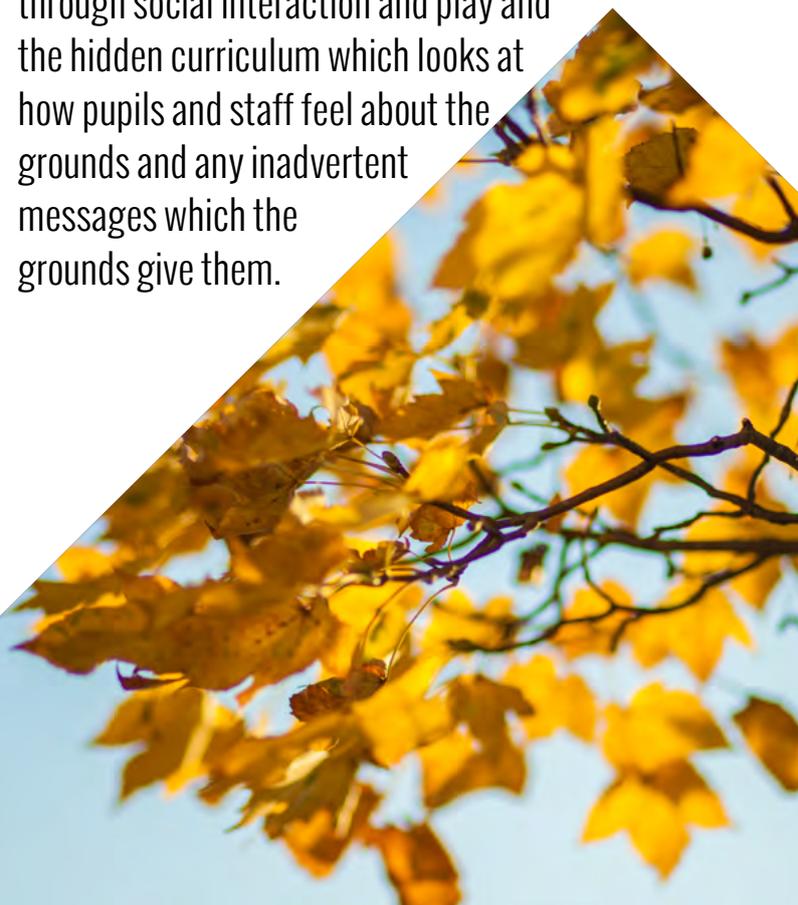
The following three themes are key to a successful approach and outcome.



## HOLISTIC

Consider the whole site, all aspects of its use and the wide range of needs of the school community (and particularly the pupils). The decision may be taken to focus on one aspect or area of the grounds for learning, but it is important to know how this fits in with how other areas are used as well as the school's wider plans. An annotated base plan, highlighting the footprint of the building and the surrounding grounds, will help focus this discussion. Photos of the current spaces may also help. Consider all aspects of the curriculum too. That is the formal curriculum

which involves subject or topic based lessons outdoors, the informal curriculum which is concerned with pupils' personal development through social interaction and play and the hidden curriculum which looks at how pupils and staff feel about the grounds and any inadvertent messages which the grounds give them.



# PARTICIPATIVE

The wider and deeper the engagement from start to finish the more likely it is that solutions that work for the whole school will be found. If the outdoor learning approach is agreed, valued and accepted across the school community then it is more likely that any changes made to the grounds

will be fully used and cared for in the long-term. Involve representatives from across the whole school community, including pupils, staff, parents and support staff. The engagement of pupils links directly with Article 12 of the United Nations Convention on the Rights of the Child.

# SUSTAINABLE

Initially this involves considering the materials and plants used in making grounds changes. Beyond this, sustainability refers to the management and maintenance of the site. This goes hand in hand with the relevant changes being articulated within school policies and practices so that the project

continues to benefit the school, even when those initially involved with making the changes may have moved on.

Go outside and take a look around. Are the school grounds currently rich in biodiversity, generous in space and equipped and resourced for stimulating learning outdoors throughout the year? If the answer is no, then there are strategies to ensure that the school grounds do meet these requirements through formal learning as well as the self led learning that occurs through play during break and lunch times.



Look around again and consider the current messages the school grounds give to the children. Indoor classrooms and school corridors incorporate ever changing colourful celebratory displays of children's work, promoting pride and an opportunity to share success. Often the same cannot be said of the outdoor space - an empty space, lacking in stimulation, diversity and interest, merely a place for children to run around and let off steam before returning indoors for learning during class time. Research shows that this sends a very clear message to the children about the value of the indoor space versus the outdoors as the primary place for any real life, rigorous learning (reference 'Special Places, Special People' by Wendy Titman and published by Learning through Landscapes and World Wide Fund for Nature - 1994). Moreover, the disparity between the efforts made to create a nurturing, comfortable, ever changing environment indoors versus the amount of effort made in the same way outdoors is clear.

As part of the process of reviewing your current grounds think about how the children should feel outdoors. Each school is likely to have different priorities for their pupils. It could be that the children's emotional response to the school grounds

is the most important factor, for example providing somewhere in which they feel safe, valued and confident. It may be that your school wishes to acknowledge certain values such as local heritage, faith or nature. Every element incorporated can help develop this sense of place. The grounds may also be in need of more zones with a different atmosphere for example creating a quiet, secluded space for children to undertake more focused activities such as reading or artwork.

It is important to begin by identifying existing resources and materials available in the outside space already that have a value in terms of teaching and learning. Undertaking a simple audit of the outside space and identifying what is missing provides a sound focus for



change. Focus too on the basic, practical resources available indoors which may be missing outdoors but would have a positive impact on teaching for example the availability of seating and shelter outdoors as well as access to simple, multi-purpose equipment such as chalk.

Auditing the grounds provides staff with the opportunity to reflect on the current strengths, weaknesses and opportunities of the outside space. The school grounds audit tool is a simple to use resource which helps staff to reflect upon the current outdoor space and outdoor teaching practice with the results collated as both a spreadsheet and a visual diagram to help identify weaknesses and therefore, potential improvements.

The school grounds audit tool:  
[bit.ly/School-grounds-audit-tool](https://bit.ly/School-grounds-audit-tool)





## MODULE 4

Draw out a base plan or print off a digital map showing the footprint of the school building and the surrounding school grounds. This will provide a useful focus for discussion and allow you to highlight the location of existing resources you want to keep and / or enhance as well as identifying the location of underused spaces and potential opportunities for learning outdoors now.

Schools undertaking regular and progressive outdoor learning highlight several important elements that help support outdoor learning.

They include:

- **Variety**

A space with more variation will present a wider range of learning opportunities.

- **Aesthetics**

Are there different colours, textures and visually appealing features? How does the outside space make staff and children feel?

- **Nature**

Children need nature and nature needs children to care. Research highlights the powerful benefits of nature in terms of its positive impact on health and being.

- **Comfort**

Just as when indoors children will seek comfort from quiet spaces and need places to sit and somewhere to shelter.

- **Gathering Space**

It is essential to have some way of bringing the pupils together before and during lessons, including an identified space providing a focus for discussion especially in large school grounds when children may spread out quite widely.

- **Access**

Consider how easy it is to access the outdoor space from the building and the simplicity of moving around the grounds to make use of different areas? This will certainly have a bearing upon the motivation to undertake outdoor learning, its frequency and duration.

- **Storage**

Child friendly outdoor storage is very useful, saving time accessing resources and reducing the need to carry lots of equipment to and from the building.

How well does your current outdoor space match up to this example list of important outdoor elements? What opportunities are there for improvement in terms of current use and future development?

# MEASURING SUCCESS

It is important to monitor, evaluate and review progress over time to help everyone understand what is, or is not, being achieved and to identify areas for future improvement based on outcome. It is also essential to publicise your outdoor learning achievements, both in school and with a wider audience (for example parents), and celebrate success however big or small.

Incorporate simple evaluation activities to help check progress, for example gathering baseline information about how the grounds are currently used and how staff and pupils feel about them now, along with photographs to demonstrate visual improvements over time. This way you can review effectively after changes.

*"We want our children to be creative and diverse in their thinking."*  
Headteacher quotation

*"Teaching outdoors opens up possibilities I hadn't even considered."*  
Teacher quotation



## 2) OVERCOMING OBSTACLES TO TAKING LEARNING OUTDOORS

Following completion of the audit, and the identification of where you are now in terms of outdoor learning provision, this section of the handbook focuses on how to negotiate

some of the common obstacles to help achieve meaningful outdoor learning.

- Identified ways to help address some of the obstacles facing staff when taking learning outdoors.
- Identified the types of experiences you want the children to have in your school grounds and started thinking about activities or resources you will need to support this.

As part of the audit, you will have identified strengths within your grounds or across your current practice. How can these identified strengths be built upon and enhanced further to support learning? For example, there may be access to an area of grass in the grounds, which is already a strength. With a simple change to the mowing regime the opportunity is there to enhance this space through encouraging biodiversity to recolonise part of the area which would help connect children with nature in different seasons. It would also provide an improved space for teaching activities such as biological recording, data handling, creative writing, and art with natural materials.

How can the weaknesses be addressed?

If the weakness identified is linked to the lack of variety within the space, sections five and six will inspire you to implement basic and more complex grounds' changes which will support good quality outdoor teaching and learning. If the weaknesses identified are more associated with a lack of staff ideas then section 3 provides inspiration for the use of existing outdoor features to teach the curriculum outdoors before making any changes to your space.

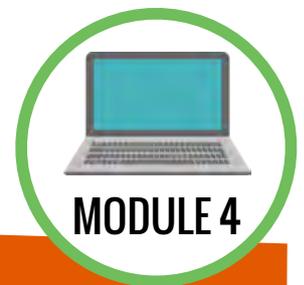
By the end of this section you will have:

Weaknesses such as the presence of dangerous materials or broken resources will need to be addressed as a priority or at least made reference to in terms of safe operating procedures in the school grounds risk benefit assessment. Equally, it may mean that the children are taken to an alternative outdoor location for learning.

Making the decision to commit to improving the grounds and taking learning beyond the classroom can be a daunting prospect but remember that even the smallest step

can make a difference and motivate others towards using the outdoors and making further changes. Think creatively about how the barriers identified can be overcome and approach them with a solution-focused attitude.

There follows a list of the common challenges identified by schools with regards to accessing and improving outdoor spaces and examples of how they have been addressed:



1. Behavioural management outside
2. Lack of time - additional preparation and effort required
3. Parental concerns and / or a lack of understanding regarding the value of learning outdoors
4. Health and safety concerns
5. Weather
6. Lack of funding / limited budget
7. Inclusion - working with children with additional support needs
8. Lack of teaching ideas



## a) BEHAVIOUR MANAGEMENT

All teachers have behaviour management strategies that they employ within the classroom, but many practitioners are concerned about not having suitable strategies to maintain discipline in a less structured environment.

The more learning outdoors becomes routine and expected then the less of a novelty it becomes. Over time children will become naturally more inclined to focus upon the task rather than being overwhelmed by the excitement of being outside as it is not such a rare occurrence. Establishing a routine is therefore crucial.

Take care to start each lesson outdoors in the same way by gathering the children together to explain the learning task and identifying the physical and behavioural boundaries in liaison with them. Utilise any existing space which will allow the children to sit together outdoors. However, the children can still be gathered in the absence of a pre-determined space, for example children can sit or stand around a rope or chalk circle or upon a tarpaulin. As with a permanent gathering space, this provides an easy way for the teacher to maintain eye contact with everyone and creates a clearly defined space for pupils to gather as and when required.





Access to flexible seating enables children to sit as and when they need to or to gather together more comfortably in smaller working groups. Simple hand held foam mat squares provide the opportunity to sit or kneel anywhere and also provide an instant dry surface to place upon an existing wet seat or log. Transporting the mats in a small box or bag ensures that they don't blow away when not in use. Equally they can be perforated in the corner and then clipped together on a carabiner for easy access and transportation.

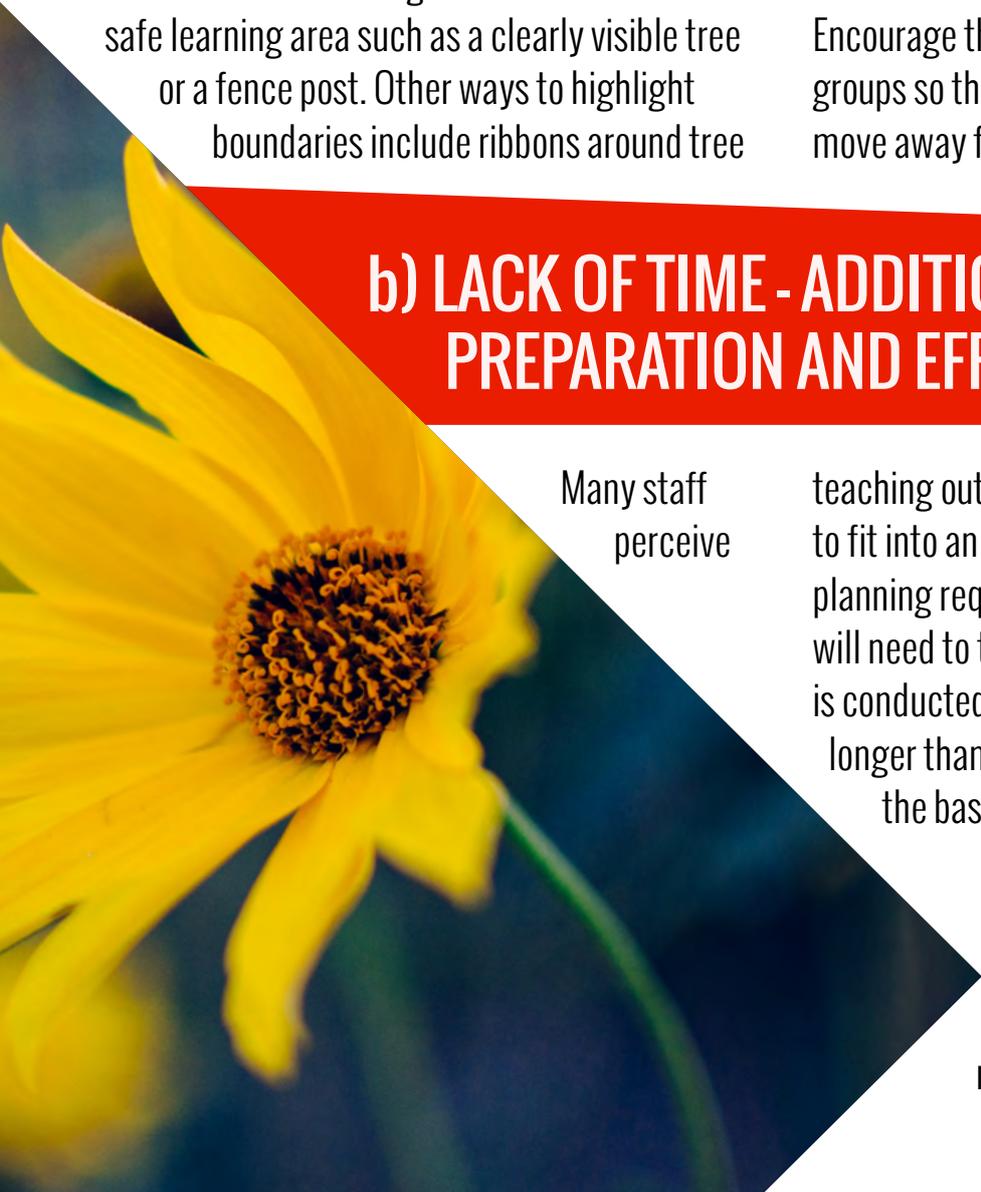
If the outdoor space is large, then agreeing a boundary area for the activity is particularly important. At the beginning of the lesson agree natural markers in the grounds that define a safe learning area such as a clearly visible tree or a fence post. Other ways to highlight boundaries include ribbons around tree

trunks, chalk markings, cones and coloured bunting or flags.

The image on the previous page highlights the way one school defines the learning area in the woodland within their school grounds.

Agree a signal for children to stop what they are doing and return to the gathering space. It is worth practising their ability to regroup quickly and effectively to help build trust. A high pitched whistle, bell or even a duck whistle all work well as they can be heard over long distances, the sound is easily recognisable and it avoids the need to shout which can damage your voice particularly on a windy day.

Encourage the children to work in pairs or small groups so that it is less likely that a child can move away from the class unnoticed.



## **b) LACK OF TIME - ADDITIONAL PREPARATION AND EFFORT**

Many staff perceive

teaching outside to be an additional activity to fit into an already busy schedule with extra planning required. Whilst it is true that teachers will need to think carefully about how the lesson is conducted outside, preparation shouldn't take longer than preparing for lessons indoors once the basic routines and resources are in place.

If outdoor learning practice is embedded it is more a case of teachers doing things differently, not doing more. When planning

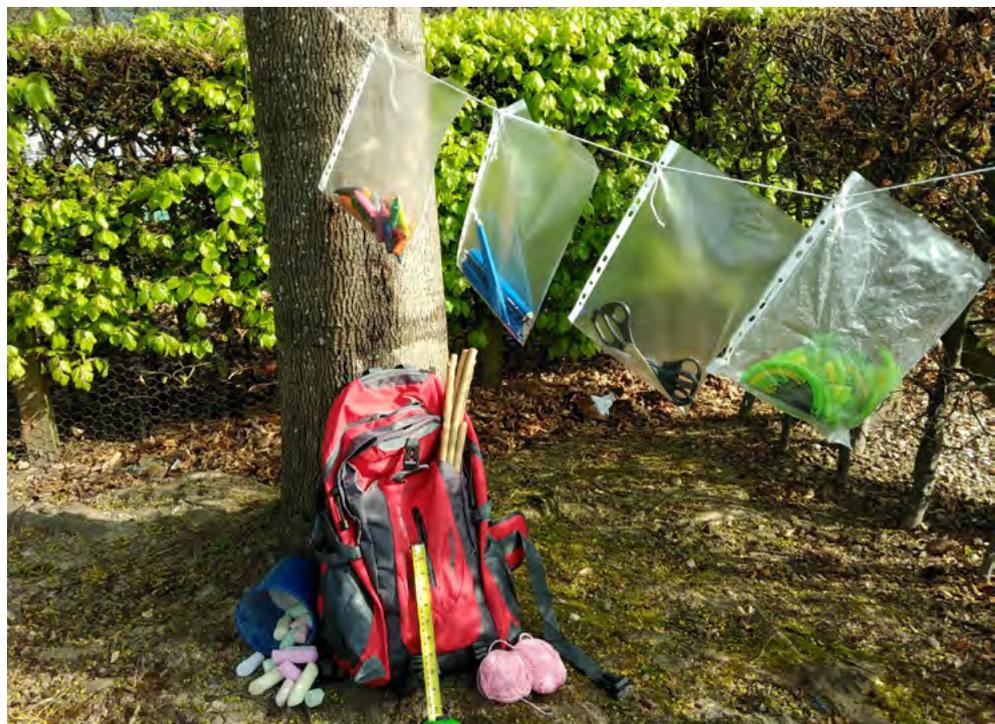
topics, opportunities can be identified to bring learning to life through being outdoors either for a whole lesson, or just for a section. The outdoors is also a great place for an impromptu activity that benefits the children at that moment in time. A quick burst of exercise, for example an active maths game in the fresh air, can be just what the children need to burn off some excess energy and eliminate classroom restlessness. These simple interactions outdoors restore the children and boost their cognitive performance once back in class.

One of the many benefits of learning outdoors is to take advantage of the resources naturally available rather than transporting the contents of the classroom outside. Gathering special equipment to take outdoors takes preparation and can impact upon the time available for learning. It can prove useful to have an outdoor learning bag/cupboard of materials or accessible storage outside thus facilitating a quick 'grab and go' transition from inside to outside.

A well-organised outdoor storage unit from which the children can access resources for themselves is a sound investment. This is an ideal location for simple outdoor kit such as garden tools, scientific

equipment, measuring devices, laminated lesson ideas, numbers, letters and chalk. Furthermore it promotes independence, with the children selecting resources for themselves and tidying away items at the end. If a fixed storage unit outdoors would be vulnerable to vandalism or theft then a dedicated trolley or a box of resources could be made available each time instead.

In conjunction with the gathering space it may be appropriate to establish an adjacent resource station where materials such as scissors, string, pencils and sticky tape can be accessed if required. Having these resources in small bags and pre-attached to a washing line in a rucksack or box means that they can readily be transported together, set up and used wherever the learning is taking place outdoors. It also helps ensure that materials remain together and are not lost around the grounds after being used.



## c) PARENTAL CONCERNS AND / OR A LACK OF UNDERSTANDING REGARDING THE VALUE OF LEARNING OUTDOORS

Until the benefits are witnessed first hand the misconception that an outside space is only for play and has limited value in terms of real learning opportunities can be prevalent. Teachers can feel pressure from critical parents who question whether outdoor learning is engaging pupils in meaningful, rigorous learning experiences.

Keeping parents updated and informed of the school's approach and any changes proposed for the outdoor space is important in helping them understand the value of what you are doing and why. Citing research and governmental policy may be an appropriate tool depending upon the school's demographic.

In short it is better to try and involve them from the outset, listen to their

initial concerns and allay them where possible. If parents feel consulted and their views valued it should lead to fewer challenges later down the line.

Part 4 includes advice on ways to involve parents and the wider community in the process of change. The general principal is that employing a variety of strategies to communicate with the school community works best. Choose examples that work best for you, for example creating an outdoor learning wall display, organising an assembly, making use of the school website and involving children in writing newsletter articles and flyers about learning activities that they're involved with. Inviting parents to get involved is a good way to promote understanding, asking them to come to an assembly or come into school an hour before the end of the day to see a class undertaking learning outdoors in the grounds.

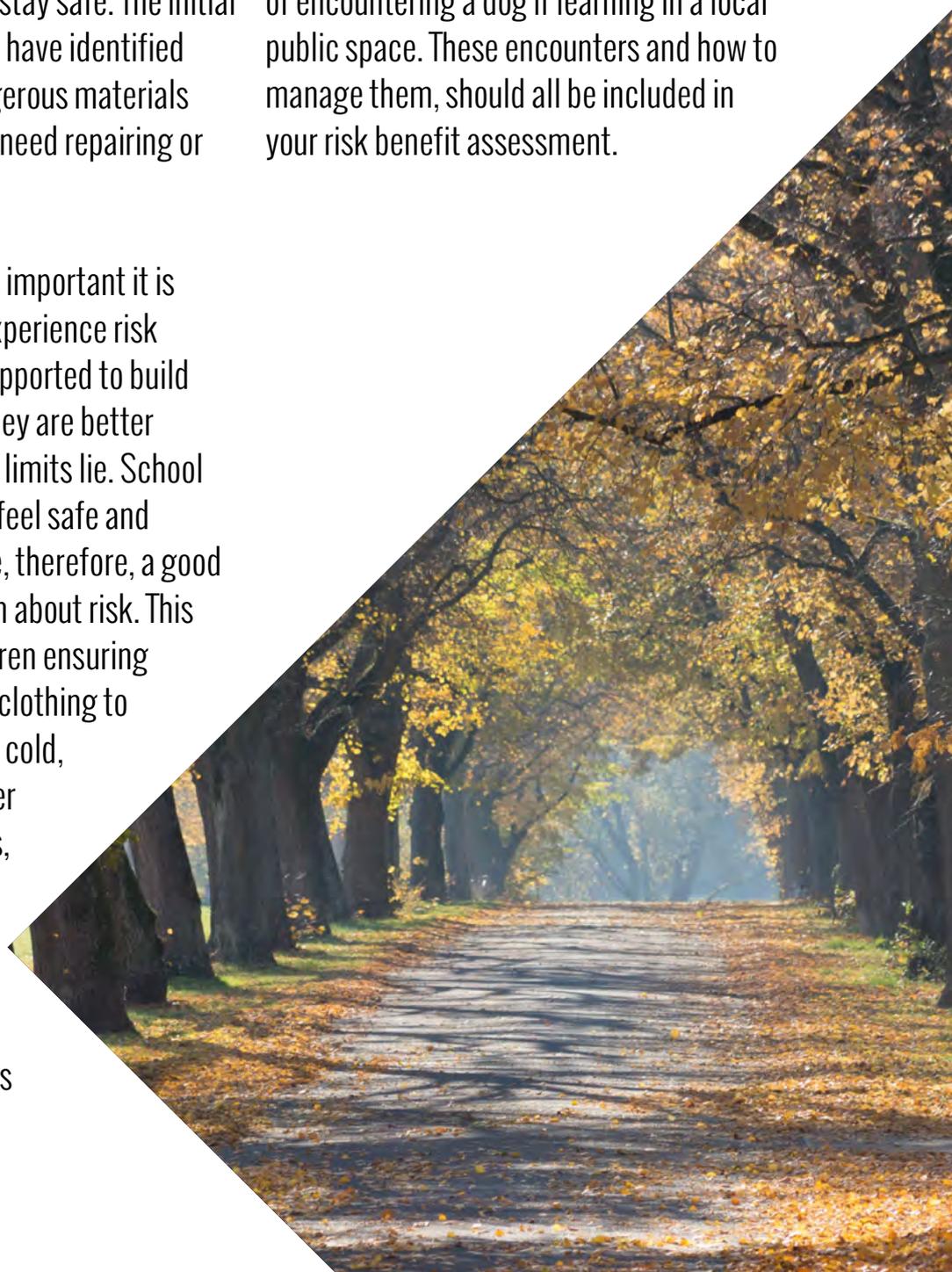


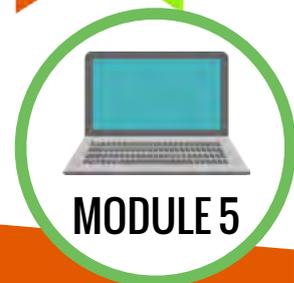
## d) HEALTH AND SAFETY CONCERNS

Schools have a duty of care and the health and safety of the pupils is of paramount importance. Making use of the grounds as a familiar environment in which the children are confident and secure builds children's understanding of how to stay safe. The initial school grounds audit will have identified the presence of any dangerous materials or broken resources that need repairing or removing.

However, whilst safety is important it is also vital that children experience risk and challenge and are supported to build resilience in order that they are better able to judge where their limits lie. School grounds, where children feel safe and hazards are managed are, therefore, a good place for children to learn about risk. This can be as simple as children ensuring that they have adequate clothing to protect them against the cold, learning how to move over rough or uneven surfaces, taking more care when walking on surfaces after rainfall and learning to identify potentially harmful plants such as nettles.

Other common health and safety concerns mentioned by teachers include those that staff have less control over, for example a pupil coming into contact with a bee or wasp, contact with ticks and the potential of encountering a dog if learning in a local public space. These encounters and how to manage them, should all be included in your risk benefit assessment.





## Info Box - Risk Benefit Assessment

A risk benefit assessment (RBA) is a risk assessment, as you are required to undertake by law. However, as well as outlining the risks and control measures, an RBA also outlines the benefits to the activity or resource and precedents for taking that risk. This can be very helpful for colleagues or nervous parents.

Undertaking a risk benefit assessment doesn't have to be onerous and is a great chance to include observations and feedback from pupils, teaching staff, playground support staff and SMT.

In summary you need to include:

- The benefits for children.
- The potential risks identified.
- The options identified for managing the risks.
- Any relevant expert views, comparisons

and precedents for example other school contacts that are doing the same thing or any relevant supporting resources and publications.

- Your final decision (your judgement about whether the benefits outweigh the risks),
- That you will share the assessment widely and regularly review the contents.

More information about current practice and policy around risk benefit assessments in school grounds across the UK (as well as worked assessment examples) can be found via the LTL website.

The final risk assessment you create must, of course, take into account policy and guidance from your local authority.



Encouraging children to stand still if they encounter a bee or a wasp is important. Both insects are much less likely to sting if the pupil remains calm. Practice a 'wasp drill' with the children in advance of being outdoors where every child is encouraged to stand still like a statue until the insect has flown off. Be aware of any children that are likely to have an allergic reaction and ensure the appropriate medication is carried. The likelihood of being bitten by a tick can be reduced by covering up exposed skin when outside and encouraging children to undertake a body check after being outdoors. There is lots of useful, practical advice online regarding ticks.

Contact with dogs is a possibility when learning in a local public space so the procedure for such an event should be discussed and agreed with the children in advance of the outdoor activity. Encourage children to stay together and not wander off, ensure that children know not to approach a dog and to stand still if one approaches them.

Using learning activities to familiarise children with natural environments in school helps with their connectivity to nature beyond the school gates and is important in developing a lifelong understanding and appreciation of the outdoors and the risks, challenges and benefits it presents.



## e) WEATHER

The weather is often cited as a barrier to outdoor learning but from an alternative perspective the changing weather through the seasons can be seen as a continually rich, real-world learning resource that helps to support a healthy immune system. If children are going to access the school grounds whatever the weather then certain things need to be in place in advance. Children and staff will require appropriate clothing. A store of spare

clothes and wellington boots can be used to support those who come ill-equipped for the weather conditions.

Including a form of covered space outdoors ensures that children can seek shelter on wetter days. A tarpaulin and rope provide a low cost, easy to store shelter solution that can be erected and dismantled quickly and also provide the flexibility of use in a variety of spaces and locations. It may also be necessary to consider shade from the sun at times. Again, a tarpaulin or other den making resources can be deployed and they can be moved as the sun moves.

Ice and snow bring their own challenges, but they provide exciting learning potential and a wider opportunity for children to learn how to modify their behaviour in order to negotiate the associated experiences (for example walking over ice on the ground).

Links to example activities in ice and snow can be found in part three of this handbook.

Parents will need to be kept informed of the school's policy on weather and outdoor learning. A clear way to communicate this is for the school to generate an outdoor learning policy. More detail about how to create this useful resource can be found in section seven of this handbook.



## f) LACK OF FUNDING / LIMITED BUDGET

Although funding is always welcome, this handbook and the associated resources focus on making the most of any outdoor space for learning and making simple changes which only require a limited budget. There is the potential for outdoor learning in any environment and the key message is about using the existing grounds to their full potential and capitalising on donations of time, skills or resources from the wider school community. Lessons themselves can also focus upon incorporating sustainable changes in the grounds for example gardening to support wildlife and the associated links with biodiversity and ecosystems.

Evidence shows that just increasing the use of the grounds can lead to developments to support further activity. Whether it

is finding out about wind resistance, making and baking on an open fire, storytelling or a debate outdoors, identifying and drawing 3D shapes or identifying and recording insects, the possibilities for low cost, even free, outdoor learning are vast.



## g) INCLUSION - WORKING WITH CHILDREN WITH ADDITIONAL SUPPORT NEEDS

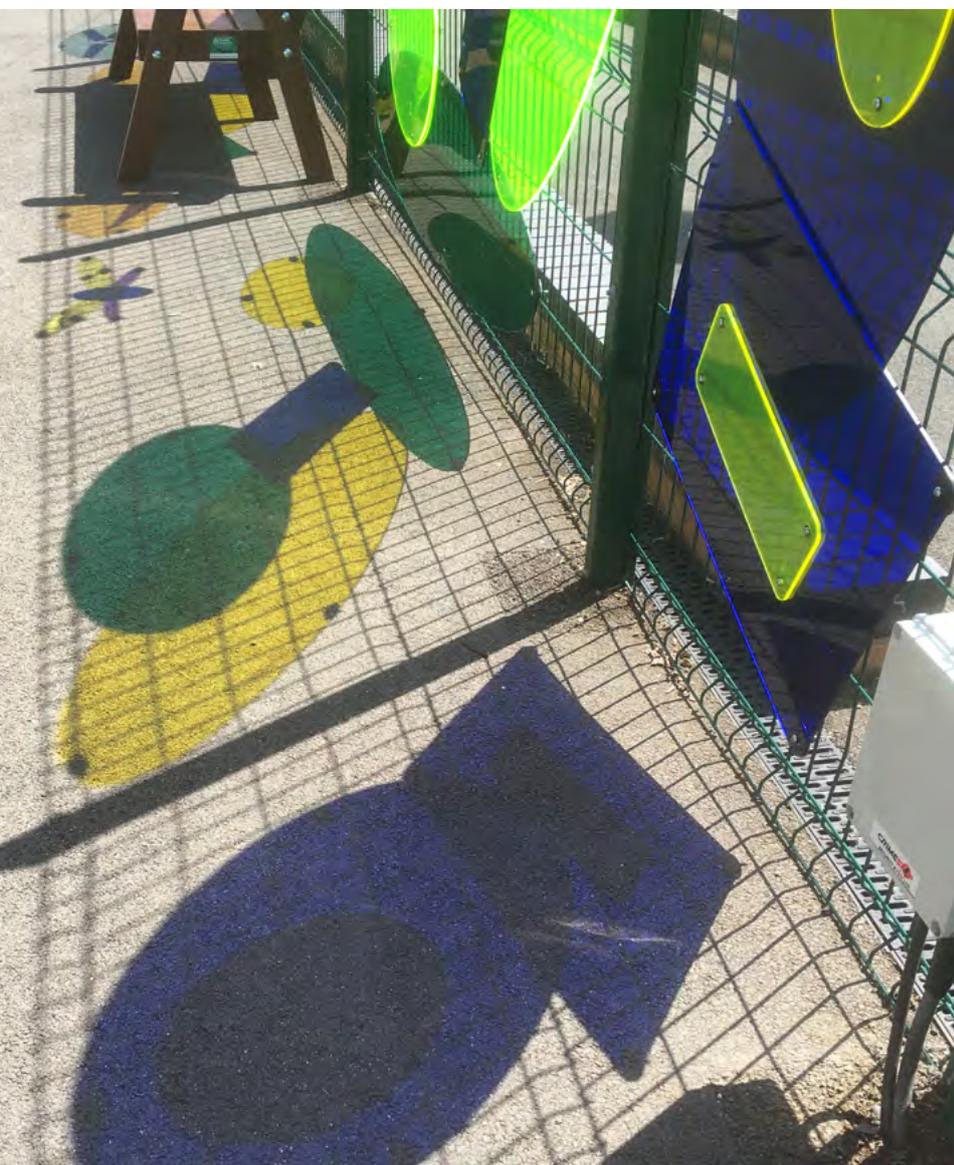
Inclusivity means being empathetic to the needs of all pupils and providing them with suitable choices in their learning environments which will enhance their dignity and self esteem.

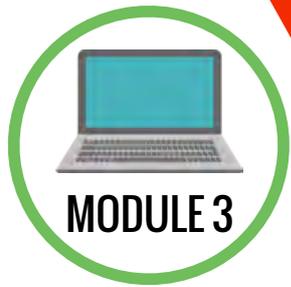
The school grounds audit will help identify the strengths and weaknesses of the outdoor space regarding access and use by all children, and this

will help inform the simple changes required. In terms of moving around the outdoor area, do pupils with mobility difficulties face physical barriers such as steps, narrow paths or uneven surfaces? How can improvements be made to support access for all? Perhaps some routes need greater definition with contrasting ground surfaces, textures or painted colours to support

children with visual impairments.

What opportunities for sensory stimulation currently exist and how can they be improved? How suitable is outdoor furniture for wheelchair users or those who need physical support? Generally, seats with arm rests and backs are most appropriate for children who need physical support. Grouped seating, rather than linear arrangements, facilitate social interaction and allow better access for those with mobility issues.





### MODULE 3

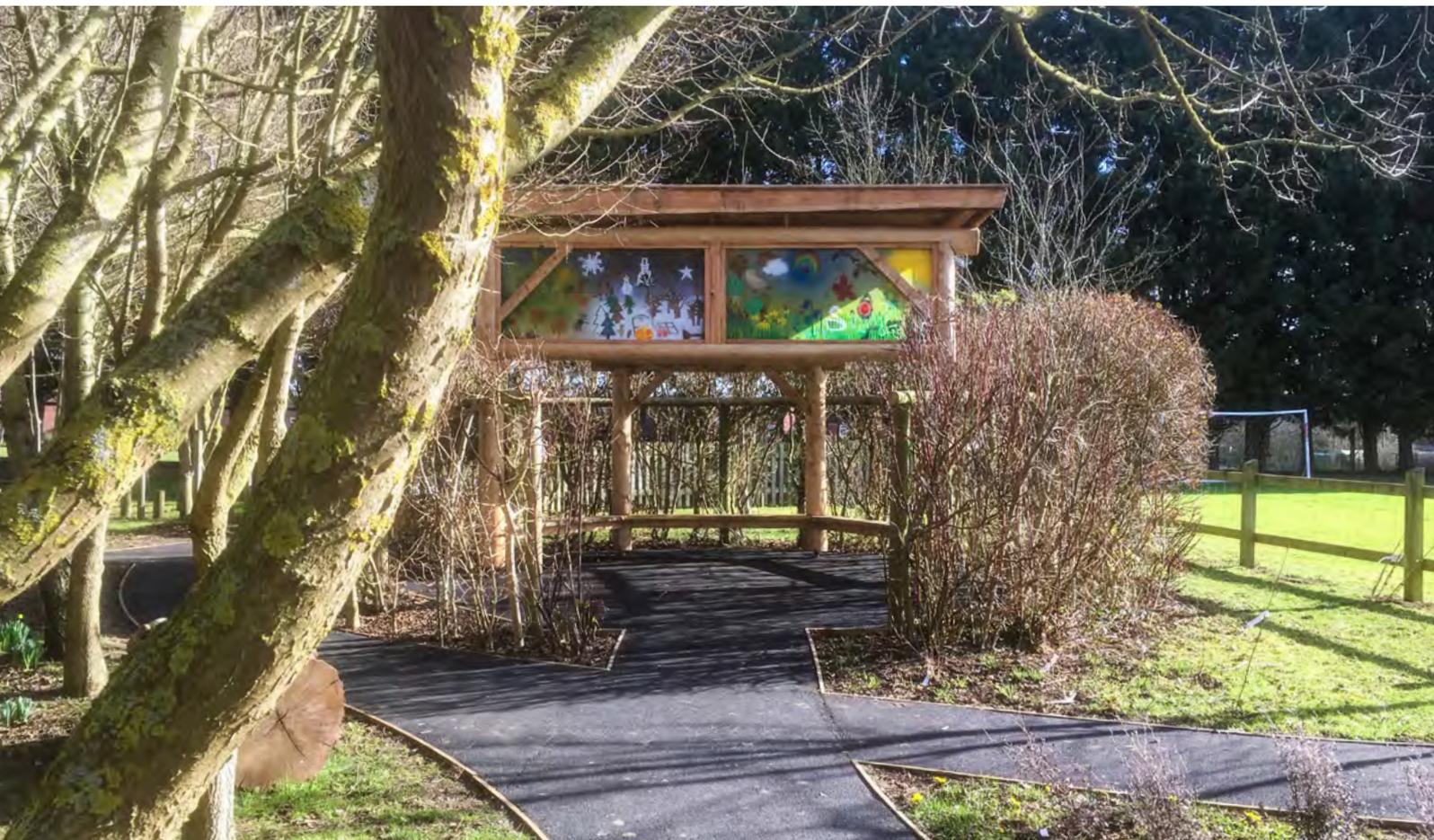
## h) LACK OF IDEAS REGARDING TAKING LEARNING OUTDOORS

Practitioners who incorporate the outdoor environment into their teaching practice on a regular basis view the school grounds as an extension of the indoor classroom.

Currently only a small percentage of time, if any, is dedicated to learning outside the classroom within initial teacher training in the UK and unless a school is already committed to teaching outdoors then the prospect can be daunting.

The benefits of outdoor learning for children's education, health and wellbeing is well documented and there are lots of existing training courses, resources and

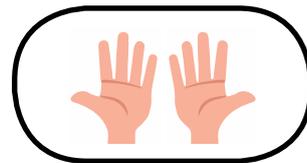
organisations available to support teachers with taking learning outdoors. However, one of the factors that all teachers have in common is a lack of time. Add the perceived barriers identified on previous pages, as well as a lack of ideas and experience outdoors with regards to teaching stimulating lessons, and it's no surprise that some staff choose to confine their teaching to the indoor classroom. This handbook and the associated modules and activities, have been put together to help build the confidence of staff to incorporate the outdoors as part of their existing teaching practice.



# 3) USING EXISTING GROUNDS FEATURES TO TEACH THE CURRICULUM

This section provides inspiration for the usage of existing grounds' features to teach the curriculum outdoors. Each common feature of school grounds will be discussed in turn, with a

progressive range of learning activities from all main areas of the curriculum. More details on suggested learning activities can be found in the online activity bank wherever you see this logo.



## Top tips

- Taking learning outdoors involves doing things differently, not doing more. Look at what you have to teach and identify what can be taught outdoors. How can you make an aspect of learning come to life using real life experiences outside?
- Activities don't have to last a whole lesson. Start small, for example an active maths activity, then build time spent outside as confidence increases.

*"The outdoor learning environment takes away the fear of failure. All pupils have the opportunity to experience success when learning outdoors."*

Headteacher quotation



At first glance, a tarmacked open playground can appear a vast unstructured, uninspiring space but to a child the crucial word is 'space.' The minute a child steps into an area like this they invariably run. Hand a child a piece of chalk on the blank tarmac canvas and they will freely mark-make with little encouragement. Another benefit of getting out into the yard is the better sound dissipation. The role of an educator is to harness this potential and utilise it to the benefit of learning.

## **Languages**

Armed with some chalk the playground can become one huge exercise book. However, unlike the jotter back in the classroom children often feel more confident to attempt tasks given the transient nature of chalk markings. Take a camera out and photograph their letter formation, their spellings, their punctuation and there is your record of a learning objective met.

The playground can become a stimulus for extending the children's vocabulary seeking nouns, verbs or adjectives or objects beginning with each letter of the alphabet. Similarly older pupils will appreciate the freedom to use chalk to sequence stories or

write poetry in a chosen style such as haiku, limericks, acrostics and pattern or shape poetry.

## **Science, Technology, Engineering and Mathematics (STEM)**

Equally any tarmac grounds lend themselves to a mathematical scavenger hunt in which children can identify patterns, shapes, quantities, sizes and so on. Similarly to literacy work, use the grounds to encourage children to have a go at numerical challenges as you may find them more liberated. The following areas of mathematics particularly lend themselves to chalk work on tarmac: number lines; plotting coordinates; creating equations; data handling and exploring symmetry. Profit from the expanse of space and take practical work on forces and motion outside. The larger scale will enthral the pupils. Consider Newton's laws of motion when launching rockets, racing balloon powered cars or releasing parachutes and never again teach the scale of the solar system in a classroom - or a blue whale for that matter!



## Rocket Science Scale Dinosaurs

The school building and the tarmac space offer tangible opportunities for real world learning in your locality. Embrace your tarmac space in all weathers and see the sunshine, rain, wind or snow as valuable

learning resources for free. The sunshine offers the potential to undertake studies on shadows. You could even make your own sun dial. If it rains why not conduct an investigation into how fast playground puddles evaporate. Wind energy can be harnessed for kite flying, wind socks, studying air resistance or even challenging the children to determine the best place to position a wind turbine. Snow can be a great building resource for construction challenges or a focus for the study of changing states of matter.

Look at the effects of

weather on the building; get to know the different micro-climates around the grounds. Go out into the playground and encourage the children to devise their own place-based questions and use one of those questions as the stimulus of a series of investigative lessons for some truly pupil-led learning. This is based on the Outdoor Journey principle devised by Edinburgh University..

### **Expressive Arts**

Have fun creating huge scale art installations designed for a bird's eye view. The children could use junk, a huge canvas of some sort or even their own bodies! There are also many ways the children can contribute towards making an uninspiring grey space more aesthetically pleasing e.g. weaving into railings, painting murals or creating mosaics.

A busy music lesson trapped inside an airless classroom could be rendered much more manageable outdoors as the noise is much less oppressive in the open air. The outdoors can also provide inspiration for the composition of new music by listening to the birds, rain, wind and so on.



## Other Curricular Areas

A big blank tarmac square can be a great resource for: designing, drawing and following maps; learning about coordinates and scale. Children can learn how to give directions and find 'the treasure' on self-created, imaginary maps. The open space could equally become a space to model natural disasters, human or physical landscape features whether drawn or built out of materials such as tarpaulins and cardboard.

Looking at moments from history, why not take an iconic battle, invasion or settlement design and re-enact or recreate it upon the tarmac?

It could even be demonstrated for another year group. Turning to more local history; interview grandparents, discover the games that they used to play and recreate them on the tarmac as a celebration of local social history. Go a step further and have the children write instructions which can be laminated and shared enabling others to experience the games.



# OPEN GRASSLAND

You only need to hear the delight of children when they are told that they can go onto the grass at playtime to realise its appeal although the benefits extend far beyond it being a softer surface upon which to fall! It may be nothing more than a well-used patch of amenity grassland but nonetheless it is a habitat. Where there is soil there is life.

## Languages

Many of the suggested language-themed activities could also readily be achieved on tarmac but there is something inherently more calming about sitting in the grass and being surrounded by greenery. Grass and other wild plants can become an inspiration for stories and all types of poetry. Encourage the children to adopt a bug's eye view of the world and write from a different perspective. Alternatively they can lie down and partake in some whimsical cloud gazing to promote imagination, use of descriptive language or 'big' questions.

## Science, Technology, Engineering and Mathematics (STEM)

Open grassland similar to tarmac provides the potential for measuring and estimating larger distances. A lot can be done related to health and fitness using school fields e.g. heart rate studies or pedometer based investigations.

A grassy surface better lends itself to lying down and creating 2D shapes or different angles. Go a step further and use sticks and string to create 3D stick shapes. The benefit of being able to anchor objects into the earth means children can equally be challenged to design and build any number of temporary structures from shelters to bridges.

The presence of grass and any other wild plants enables surveys of biodiversity such as earthworms, playing field plants or other invertebrates. The soil can be sampled and studied. Plants can be collected to better understand and identify their component parts - alleviating the need to ever use a 'label the flower parts' worksheet ever again!



## **Expressive Arts**

Apart from the big space afforded by grassland for larger scale art. The other plants and animals thriving in grassland can provide a good focus for close up detailed sketching or water colour painting.

## **Other Curricular Areas**

In terms of health and wellbeing benefits, many schools have adopted a daily mile in which all pupils run around the perimeter of the grounds at some point during their lessons each day.

Earth is a basic modelling material for creating mini replicas of geographical features such as mountains and valleys, riverbeds or canyons. Looking from a human geography perspective, pupils could be challenged to try creating homes from around the world such as South East Asian stilt houses or African/Indian mud houses. Take this approach back in time to explore ancient technology in settlement building.



# TREES

Apart from an intrinsic connection to trees as the providers of many resources, it has been proven that looking at trees simply eases stress and enhances contentment. Trees offer a welcome sense of permanency within an ever-changing world. Trees bear witness to a community's history and hold its secrets. If there is one or more mature tree in the grounds it is guaranteed that children will remember it fondly in their hearts even when they move on.

## Languages

A tree can be a great source of inspiration throughout the seasons: a permanent fixture to visit and study from different perspectives. 'Poetree' is an activity using a tree's roots, bark, branches and leaves to stimulate creative writing. The poetry can take the form of more descriptive adjectives, alliteration or similes.



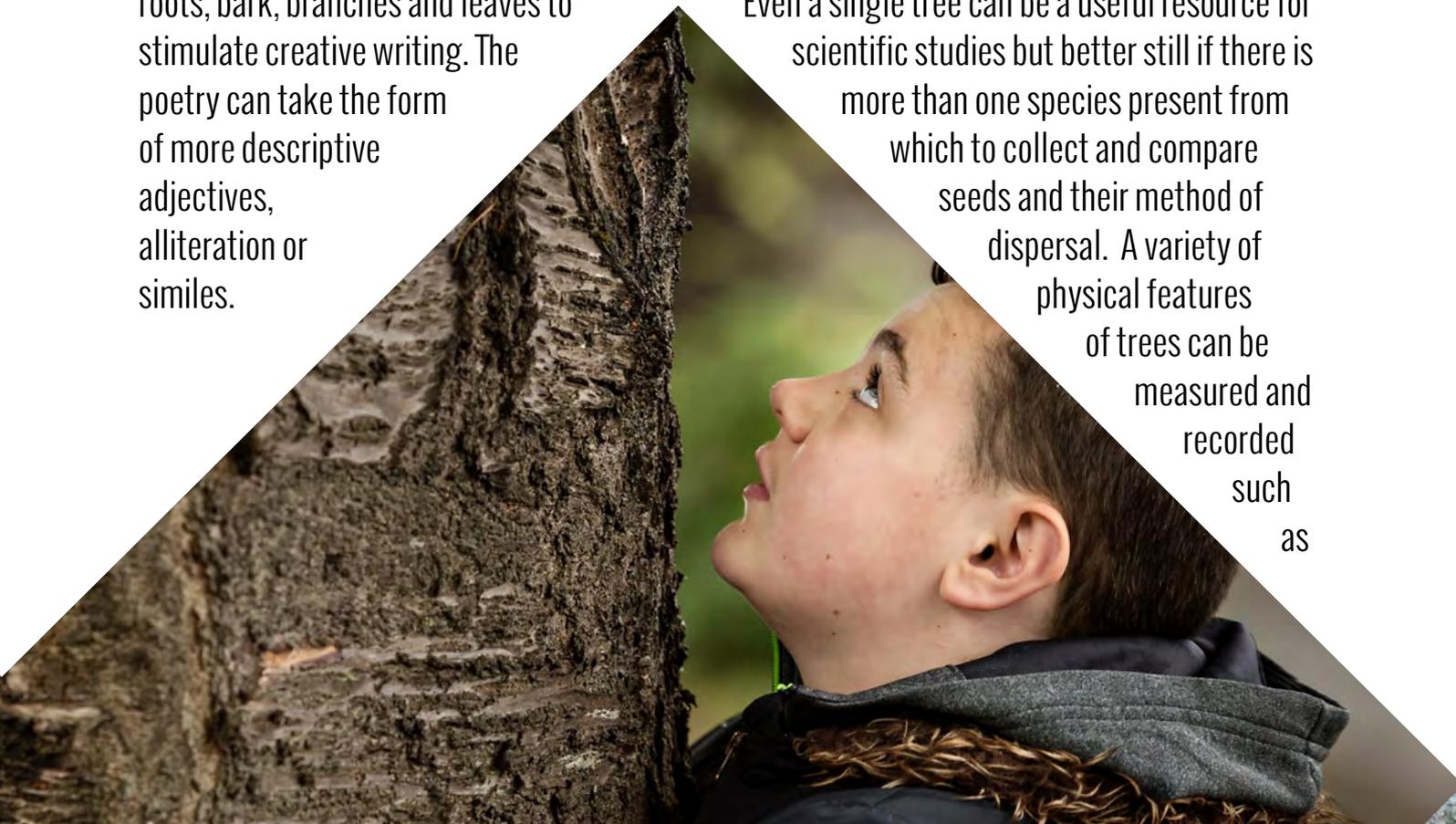
## Poetry Poetree

Trees are frequently a subject of folklore and fairy tales. Children will enjoy learning about the history and the mythology of the tree species in their grounds and they will relish creating their own even more.

The special atmosphere beneath the canopy of a tree is ideal for the telling or reading of stories and also imagining new adventures perhaps from a woodland creature's view of the world!

## Science, Technology, Engineering and Mathematics (STEM)

Even a single tree can be a useful resource for scientific studies but better still if there is more than one species present from which to collect and compare seeds and their method of dispersal. A variety of physical features of trees can be measured and recorded such as



height, trunk girth or canopy spread. If there are both deciduous and coniferous trees these provide a great basis for a comparative biodiversity study. The respective abiotic factors: soil pH, soil temperature, light levels and so on can be compared along side the species living in the leaf litter, the bark and the canopies.

Trees offer a wealth of useful natural tokens such as seeds, sticks and leaves. These can be employed for a variety of mathematical activities. Nuts and seeds are great for counting, mathematical functions and equation work. Whereas sticks lend themselves to work on shapes, angles, nets or symmetry.

### **Expressive Arts**

The magical fairy tale quality of being beneath trees can be a stimulus for role playing dramatic adventures. Trees can even be brought to life with a clay face or adorned with garlands and yarn bombing.

The seeds, sticks and leaves can be used as resources for art work such as prints, pressings, sculptures, collages or rubbings. They could equally support the creation of natural musical instruments.

### **Other Curricular Areas**

That old tree in the grounds could provide a nice focal point for local history if children stop to consider what that tree has witnessed through time.



# GROWING AREA

Many schools can find themselves in the trap of a series of under-used forlorn looking raised beds after initial aspirations that every class will be out using their individual plot all year round. Do your planters look like this? (see photo below) The processes of growing and harvesting can offer real enrichment to learning but it does require careful planning. Educators need to be shrewd and think not of how they will squeeze more into an already crowded curriculum but more of how learning activities can be done differently in order to successfully incorporate growing into long-term planning.

In the current climate more than ever, growing and harvesting offer positive messages in terms of learning for sustainability, healthy eating, understanding of provenance, production and trade. These are tangible global themes which can be linked closely to different aspects of individual nations' curriculum.

## Languages

Any gardening task whether planting seeds, maintaining a planter or harvesting

produce is potentially a new skill and as such, can be written up as a series of instructions for peers to follow. It does not need to stop there as the harvest can be used in recipes or for arts and crafts. The items growing could even provide great stimuli for poetry.

## Science Technology Engineering and Maths (STEM)

The planning of a growing area presents a wealth of mathematical related experiences for example: a budget may be required to record the costs of items and quantities needed; the volume, area and capacity of any planter will need to be calculated; a schedule of planting and harvesting can be established with reference to growing calendars and quantities of seed necessary for the area to be covered and the sowing rates of different types of plant.

Any crop is a valuable resource for real world learning. The conditions can be altered to support investigations into the different abiotic factors like temperature, light level, pH of the soil, moisture content or the addition of fertilisers. Biotic factors such as other plants growing and the other organisms present and their impact upon growth can also be studied.



Plants are of course a living example to demonstrate the key biological processes of photosynthesis and respiration.

### **Expressive Arts**

Do not get hung up on using every spare patch of earth in planters for directly growing produce. Art installations can look fantastic in amongst the plants and let the children take a lead in creating them. Simple but effective ideas include:

- using painted pebbles;
- creating insect or flower-themed sculptures;
- Weaving and decorating frames for climbing plants or brightening up the outside of planters with relevant colourful designs. The children could also design living pictures using the different coloured foliage and flowers.

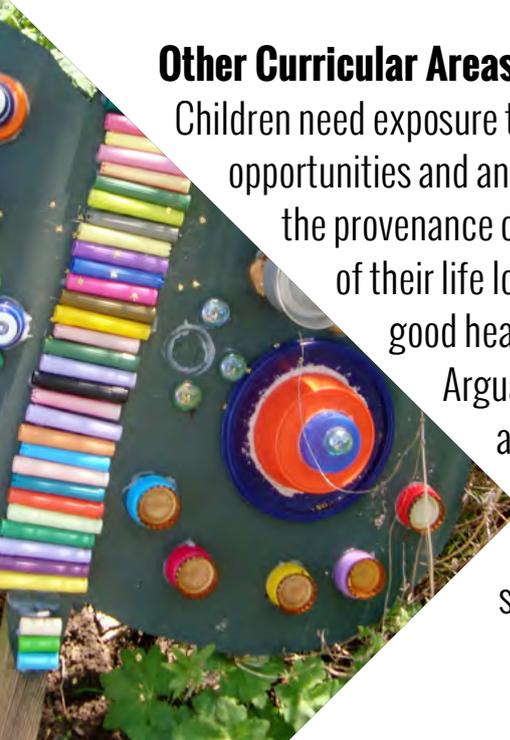
### **Other Curricular Areas**

Children need exposure to healthy eating opportunities and an understanding of the provenance of their food as part of their life long learning for good health and wellbeing. Arguably the easiest and most effective method of doing so is to have something growing

in school grounds even if it is simply some potatoes in a grow bag.

The delight that children will take from cooking and eating the very same potatoes that they planted a few months earlier is a very powerful positive learning experience. Their personal connection with the harvest will engender a more open attitude towards tasting new recipes which use their produce.

If the growing area is more extensive and diverse it can be used as an area for enterprise. At Inverness high school pupils harvest the produce, they look at how they can add value, they sell the products to the local community and then they invest the income back into the grounds for next year's growing projects. For example they harvested and dried wild flowers that they had grown. They pressed the dried plants into flat rounds of clay and created beautiful bespoke coasters to sell. Why not think about how growing or farming practises have changed through the ages.



What did the Vikings grow? What were popular Roman recipes? The home front during World War 2 is a popular class topic and promotion of 'Dig for Victory' was a big element of everyone playing their part in

the war effort when food was hard to come by. Children could become fully immersed in such a topic by digging for victory themselves!

## AREAS FOR NATURE

Many schools may have a 'wildlife garden' but too often this can become a precious area that is locked away from every day use. Consequently the area is not treasured and protected by the children because it is not experienced on a daily basis. Consider the unintended messages to children who are prevented from accessing such areas e.g. they may feel: mistrusted; unworthy of the most special area of the grounds or that nature is something to be kept in isolation.

These 'havens' can become overgrown, unkempt and not directly managed and

their creation merely a box ticking exercise in terms of the school supporting biodiversity.

However, areas for wildlife can and should be a great opportunity for exploration and discovery at different times of year. If an ethos of care and respect for these special spaces is nurtured within formal class time then it follows that the children will respect and value the nature around them at all times.

Furthermore it is regular exposure to nature that helps instil these values within children so arguably nature should be welcomed throughout the grounds.



## Languages

A wild area can offer an array of interesting scents, textures and colours which provide a perfect stimulus for sensory explorations. Children can create magic potions, spells, perfumes or a witch's brew. Such exciting creative activities constitute a hook for follow on literacy work.

The plants or animals found in these areas could even be interviewed. What does that snail have to say about life in the school grounds?

Why has that tree lost a branch?

Who lives down that hole?

Beatrix Potter used her locality to create characters and tales of their adventures.

Immerse the children in the nature on their doorstep and watch them be inspired.

If children can sit comfortably in amongst the nature then it can equally be a lovely zone in

which to sit and read either independently or stories could be shared in this space of tranquillity. Even better if the stories are somehow related to nature.

## Science, Technology, Engineering and Mathematics (STEM)

Wildlife is an instant resource for surveying. For example plant species, invertebrate diversity in the soil or in the trees and bushes, bird species, aquatic invertebrates etc. The results of these surveys provide real world statistics for a range of rich data-handling activities.

## Citizen Science

Citizen science is the practice of public participation and collaboration in scientific research in order to increase collective scientific knowledge. It can be a great tool for meaningful place-responsive outdoor learning when pupils engage in surveys about a certain feature of

their local area. The data collected is submitted centrally and the pupils have the opportunity to compare their findings with those across the nation. It can even inform them in making changes to improve their space.





The mosaic of habitat types in nature can be used as a springboard for learning about adaptation. Challenge the children to model new creatures out of clay or other natural materials. Ask them where the animal would make its home and ask them to explain how the animal would be adapted to survive in that particular habitat.

Nature will always appreciate a helping hand; indeed the internet is full of instructions for making recycled bird feeders. Go one better and have the children design feeders of their own considering the adaptations of different bird species e.g. ground feeders, nut feeders, insect eaters etc. A similar approach can be taken to insect homes or feeders.

### **Expressive Arts**

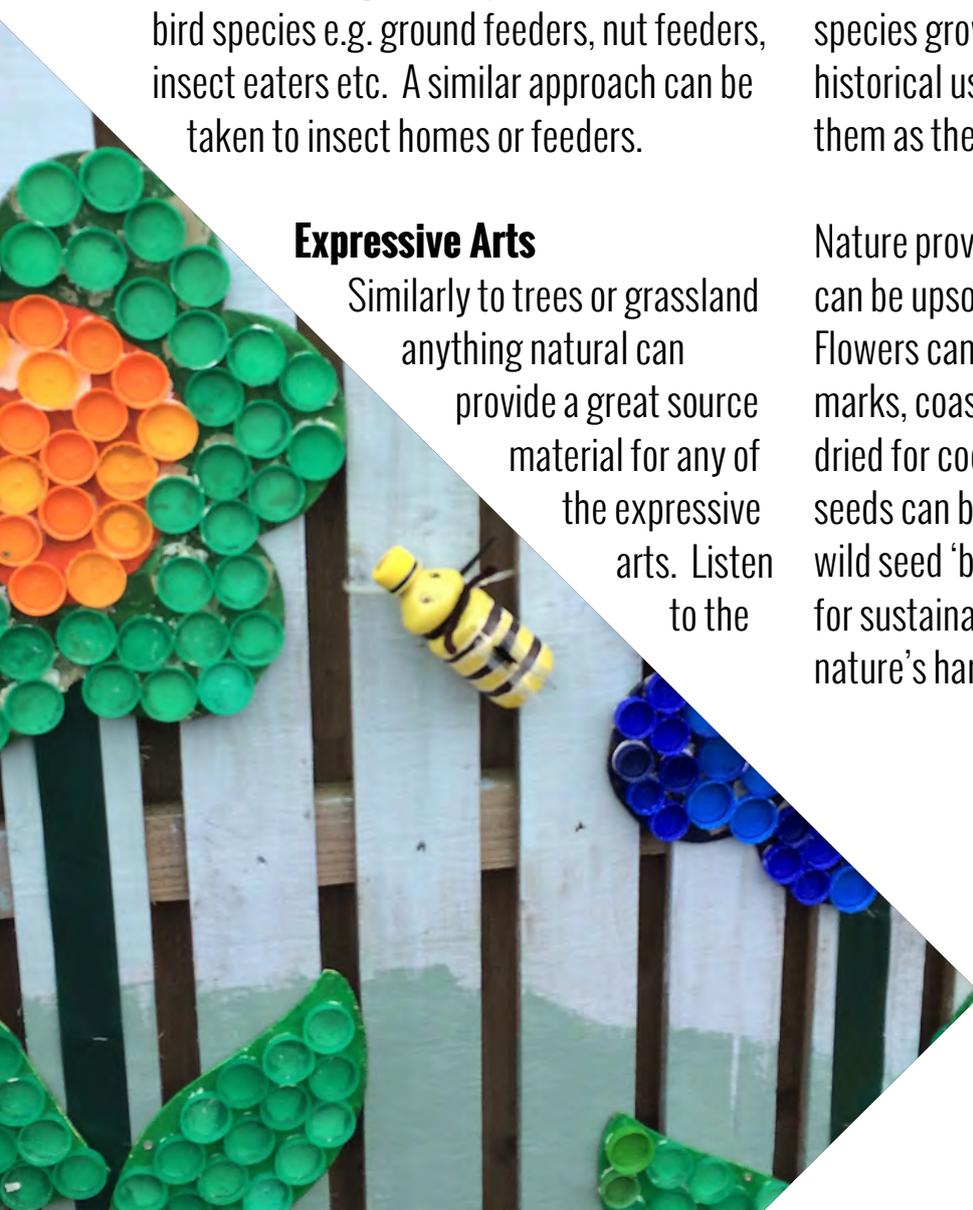
Similarly to trees or grassland anything natural can provide a great source material for any of the expressive arts. Listen to the

sounds to create music, extend the activity and have the children write accompanying lyrics. Sculptures, sketches, murals, videos, dances can all emerge from a natural inspiration. Think of the honey bee waggle dance, the variety of shapes of seed pods, the intricacy of a beetle's body form or the colours of a butterfly's wings.

### **Other Curricular Areas**

Our ancestors used a whole range of materials from nature for their day to day activities from food to tools from medicines to materials. How about identifying the species growing naturally, researching their historical usage and even attempting to use them as they would have been used?

Nature provides a wealth of resources which can be upcycled for enterprising purposes. Flowers can be pressed and used for book marks, coasters or hangings. Herbs can be dried for cooking or fragrance. Wildflower seeds can be harvested and used to make wild seed 'bombs.' There is a strong learning for sustainability message around using nature's harvest.



# SEATING/GATHERING AREAS

The majority of schools will have some outdoor seating provision. Indeed a suitable gathering area is essential for establishing an effective outdoor learning routine. Whether the current seating is conducive to that is something that will require reflection. Refer to part 1 for advice.

It is highly advantageous if the school already has sufficient seating for a class to comfortably gather outdoors. Immediately the class are afforded a space for lessons to be introduced and learning intentions shared. Equally it is a place to re-group for formative assessment during the lesson and then again to review how well learning objectives were met and ascertain next steps during a plenary.

## Languages

A seating circle is ideal for honing speaking and listening skills and mastering debate. There are a great many tools to facilitate debate amongst young people. Using natural talking tokens is a lovely outdoor discussion technique in which participants are required to collect a natural object which appeals to them. This becomes their token to talk. A topic or opinion is raised. Everyone must spend their token during the discussion. When anybody wishes to speak, they walk forwards and place their

token in the middle and state whether they agree or disagree with the previous opinion and why. Names are never used because it is the arguments that are up for debate and not the individuals who put those arguments forwards.



## Talking Tokens

A group in a circle is conducive to more interactive storytelling. Children can be invited to step forward and take on the role of characters in the tale. Other children can become responsible for sound effects or repeated themes.

Circles can be used for many vocabulary based games including memory games, alliteration challenges or a great one is 'Just a minute' based upon a British radio show in which the participant must talk



for one minute on a chosen subject without repetition, hesitation or deviation. They can be challenged on any of those criteria and if the challenge is upheld the challenger then continues. The winner is the person speaking when the time is up.

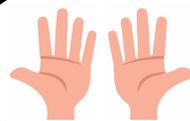
## **Science Technology Engineering and Maths (STEM)**

Mathematical circle games can also be used to great effect. Basically the same kinds of maths challenges that go on inside a classroom but the benefit being all faces can be seen and everyone is experiencing the fresh air and heightened oxygen levels to improve their concentration and enjoyment.

Looking from a technology based point of view if there is currently no seating space, think how can the children become involved in facilitating that? The area can be assessed in terms of shelter, temperature, ground cover and then the children will need to help design the seating. To begin this may be temporary so the challenge is to create something light to carry, waterproof, comfortable but not something that will blow away in the wind.

## **Expressive Arts**

Broadly speaking a gathering circle is a really useful performance space whether groups of children step up to showcase something or whether the whole group collectively creates a performance. A good example of a collective performance would be the singing of a song. A circle facilitates learning rounds and other singing styles that involve different voices at different moments. It's a great setting for recreating sounds from nature too. For example children can collaborate to collectively represent the sounds of a rain storm.



[Create a Rainstorm](#)

## **Other Curricular Areas**

An outdoor gathering circle can be a valuable area for private reflection, contemplation or mindfulness. In today's society more than ever time and space in such a place can really help support pupils' health and wellbeing. Of course it is also a useful setting for exploring learning outcomes within religious or moral education.

# 4) SUPPORT WITH PLANNING SIMPLE CHANGES TO THE GROUNDS

Parts 1-3 of this handbook have provided support in identifying current opportunities, current weaknesses and obstacles that need to be overcome to help achieve the aim of providing rich and progressive learning opportunities outdoors. As part of this review it is likely that you will have identified potential changes to the grounds that would help further enhance these opportunities. The rest of this handbook will support the

planning, implementation and sustainability of these identified changes to enhance outdoor learning long term.

The Process of Change has four stages and forms a circle, so when you have completed stage four you return to stage one. It is designed this way for two reasons. First, to see if you have achieved what you set out to do and second, to help you set off on the next stage of your project.



## Where are we now?

The completed audit of your grounds and discussions with pupils and colleagues referred to in parts one and two will have helped identify where you are, both personally and as a staff team, with taking learning outdoors and how valued and well used the school grounds are now in terms of a play and learning space available to all.

## Where do we want to be?

Whatever the scale of your outdoor learning aims, make sure you consider the whole school grounds and how all the different areas and uses will fit together. Consider what you want to be able to do in the grounds and what experiences you want the children to have. As well as increasing the frequency and quality of taking learning outdoors, are there specific changes that would help meet an identified need, for example connecting children with nature and the natural world?

When

considering use and development of your grounds it is important to be holistic, participative and sustainable in your approach. Your audit may have identified, for example, a lack of access to nature and so this may become your main focus for change, but it is important not to consider this change in isolation. How will usage of other areas within the grounds impact on the changes you have planned? Viewing the whole grounds as one space will help you decide on the best location for any changes, ensuring conflicting activities aren't sited together for example introducing nature into an area popular for sport or creating resources near a classroom window meaning those inside are disturbed when outdoor activities are taking place. Work with colleagues to create a simple vision statement for your grounds. Identifying what it is you want to achieve will help clarify your aims as a school.

Develop your vision further by creating a simple, visual school grounds plan. Developing a grounds plan and engaging the school community in the process of change will help ensure that you develop areas and



resources in the best locations long term. This will result in staff and pupil needs being met through the creation of a stimulating, diverse environment which will provide rich outdoor learning and play experiences.

Establish a school grounds group to help develop the consultation with the whole school community and plan any identified improvements. Group members should include staff representation, support staff, parent representatives, pupil representatives and the janitor. Make use of a base plan or digital map, showing the footprint of the building and the surrounding grounds, as a centre point for your consultation display using photos, drawings and comments to highlight the existing resources you want to keep and/or enhance and potential improvements with suggested locations.

Potential improvement ideas can be generated in a variety of ways, for example: through the results of your grounds audit;

through discussions with staff about what learning experiences are missing outdoors; through discussion with pupil groups and through consultation activities with parents.

To help keep the budget down, try to identify improvements that will fulfil a variety of functions or resources that can be grouped together, for example an outdoor stage that can be used as a gathering area during lessons outdoors, a play feature, an opportunity to teach drama and role play, an area for pupil committee meetings outdoors and a place to sit.

Developing a whole grounds plan provides the chance to look at the existing space with fresh eyes - a visual way of reviewing current practice and identifying what works, what does not and what is missing.

## How can we get there?

Although it is great to have a school grounds group leading the development of a consultation display and an action plan for change..... share the outcome with the whole school community.

## Flexibility

The use of the grounds will be different at different





times for different groups. Staff may use one space for teaching pupils numeracy, whilst another group study art there and a third group meet to chat or eat their lunch. Over time priorities may also change and so the use of the grounds will vary. Making sure your grounds retain flexibility of use will ensure they continue to be used overtime.

## Location

The location of resources is important to ensure best use. Do you need seating and storage in the space where you want learning to take place? Does gathering a class together in one space disturb others working inside? Could you have some children working outside where they are still visible from the inside?

## Sustainability

Whenever you create new features, or ways of using your grounds, make sure you consider the environmental as well as maintenance implications.

Many changes to your grounds will require changes in maintenance, for example a new grass mowing regime to help

establish a meadow; regularly checking new equipment; pupils getting involved with looking after a growing area or parents volunteering to clear out a pond.

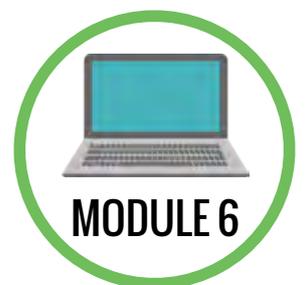
Also, think about the methods you use for managing your grounds. Do you involve the children in making your own compost? Could you make more efficient use of water for planted areas – collecting rain water in water butts and using drought tolerant plant species and mulches to reduce the amount of water required, for example?

Finally, when developing your grounds make sure you consider the origin of the materials you want to use, for example sourcing timber from sustainably managed woods. Reduce, reuse, repair and recycle, support local businesses and work with local people wherever possible. Remember that what you teach in the classroom and what you demonstrate outside in the way you manage your grounds should be consistent.

More advice on grounds maintenance has been included in part 7 of this handbook.

## Communication

Ongoing communication with the whole school community is very important in encouraging support and promoting understanding – for example sharing your school vision for the grounds and your plan for change with parents



and immediate neighbours, sharing your ethos and your aims around enhancing outdoor learning and play for pupils of all ages.

Some parents will need support to understand and get on board with the benefits and value of what you're trying to achieve and how you are managing the changes (including trialing ideas, undertaking changes in manageable chunks, and the value of less maintained wild areas in terms of exploration and discovery). There are also benefits to contacting parents with regards to requesting practical help such as providing donations, offering labour support, sending children in with alternative clothing / wellies and introducing a change of shoes for outdoor play and learning outdoors. Playground support staff need to be part of the process of change from the outset. They may need additional support / training as you progress and may need support with reviewing the way in which they supervise children in areas that have been improved for learning.

Ongoing communication with children will be important with regards to developing a connection with the outside space, a sense of place, of responsibility, involvement in implementing change, the

importance of supporting each other, maintenance and taking care of their grounds long term.

Of course, teaching staff too - input into the consultation process to identify outdoor learning resources / opportunities for the year group they teach, asking them to spend time outdoors observing play and identifying teacher free learning, setting targets for outdoor learning and reflecting on the development of their practice. Finally, don't forget to contact the authority to let them know about your plans, for example the Clerk of Works or Asset Management. Permission may need to be sought for any large scale landscape changes. Discussions with Land Services / Grounds maintenance will also help you implement changes to mowing regimes (and alert the mowing team to newly planted areas you want them to avoid).



**example of a school display that supports communication**

## Activities for engaging the whole school community

Here are a range of tasks and activities that the whole school community can be involved in that will help ensure engagement in the planning and design process leading to sustainable change in the grounds.

### Using overlays

Overlays (large sheets of tracing paper) are a great way of collating information on different aspects of the school grounds by

simply laying the tracing paper over your grounds plan and annotating the sheets. They can be used individually or combined to see how different aspects of the grounds interact.

Decide on the theme of each overlay, for example the quality and location of seating or shaded spaces. Make sure you make a note on the sheet about what it is focussing on and mark something on your overlay that matches a key feature on your base plan so that it is easy to line up you overlays as you go through your project.

# Top tips

- Use different colours to indicate different features or different people's views:
  - Use a traffic light system for showing the condition of different features - a seat in good condition would be shown in green, in need of replacement in red and something in between in amber.
- Use different colours for the activity or opinion of boys and girls, different year groups or staff and pupils - depending on which bit of information you are focussing on with a particular overlay.
- Use different colours for different times of year.
- Use different symbols to indicate different features, either those that exist or those you proposing in a particular area. Add a key to explain the symbols around the edge of the overlay.
- Use masking tape to secure your overlays -easy to attach them on top of the base plan and onto each other (and easy to remove as necessary).

- To see how different aspects interact, lay the overlays on top of each other. A good way of seeing how this works for up to four overlays is to tape them along a different edge of the base plan then you can lay them over your plan one at a time or all together.

- Groups of staff, pupils or parents can work on different overlays then bring the information together or they could all work on the same theme and put forward their suggestions for consultation to determine the scenario that would work best in reality.

---

## Life Size Planning

This imaginative activity encourages children to use props to create their outdoor space and find out how well their plan will work, for example using actual seats to help plan a gathering / seating area outdoors. Moving the seats around helps make the decision between different locations, layout and scale (helping staff and children visualise how much space will be required for access and seating. Take photographs of the activity to remind everyone of the outcome. You can also use this as an active maths activity and create a scale drawing of the final plan.

## Inspirational visits

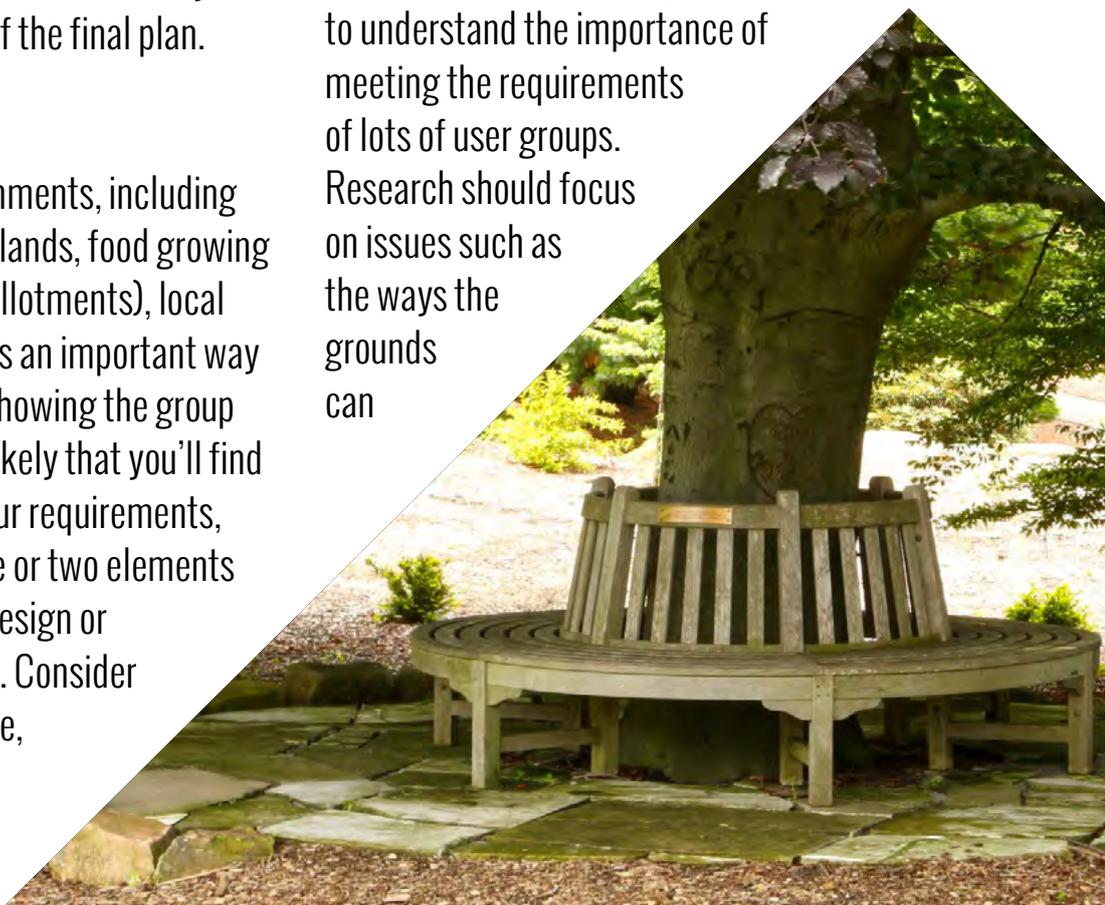
Visiting inspiring environments, including other school sites, woodlands, food growing environments (such as allotments), local parks and greenspaces is an important way of gathering ideas and showing the group what is possible. It's unlikely that you'll find schools that meet all your requirements, but many schools do one or two elements of school grounds use, design or management really well. Consider visiting schools that have, for example, school

community:

- excellent community facilities
- adventurous, challenging or risk-embracing grounds
- a strong focus on learning outdoors
- grounds that nurture and promote wildlife or sustainability.

## Research and development

Giving members of the school community specific research jobs to undertake is a great way of engaging them across the lifetime of the project and helping them start to understand the importance of meeting the requirements of lots of user groups. Research should focus on issues such as the ways the grounds can



meet inclusion needs, the kinds of materials or features that would suit the space or the users, and how to integrate and welcome the community beyond the perimeter fence into the school grounds. Other important research tasks could include discovering:

- where informal use of the grounds happens (for example, dog walking).
- where the perimeter is insecure - desire lines/unofficial routes through.
- what kind of impression they would like the entrance to the school to convey to the outside world.
- what elements of local heritage could be incorporated into the planning or design elements to help develop a sense of place.
- who uses the site at different times of day and night.
- where learning takes place already and why that space works well.

Involve children in researching

particular features. This could be book or internet research: if a wildlife pond is to be created, what size and shape does it need to be? What plants will it need? Other research can be more practical: if purpose-made seating is on the plan, what height and depth is most comfortable for the size range of children in the school to ensure they are comfortable outdoors?

Everyone likes to absorb and digest information in a different way, so in order to fully engage representatives from the whole school community it's important to try a variety of different techniques.



**As well as the examples already given, consider some of the following activities:**

- Think about the feel of the school grounds. Do you want it to be calm with natural materials, or lively with bright, colourful features? Gather together lots of images of the outdoors - some may be of school grounds, others of woodlands, beaches, parks and urban settings. Split up into groups and take it in turns to focus on the different areas of the school grounds - for example, a wildlife area, or seating area. Ask each group to produce two mood boards - one with images reflecting the kind of space they would like to spend time learning in, another with images creating the type of space they wouldn't like to spend time in.
- Using message boards placed around the school (with pens and sticky notes available) to encourage comment on existing features and proposed features highlighted on the grounds plan.
- Using sticky 'dots' for children and adults to vote on mood boards or the grounds plan highlighting new features.
- Encourage a pupil group to take on the role of tourist guide and take people around the grounds while recording their opinions about the different spaces, locations and features.
- Taking photos of different areas within the grounds, printing and creating a display requesting feedback about the various spaces.
- Setting up a school question and answer session - an assembly session or lunchtime meeting with members of the school grounds group sitting on a panel and responding to questions from the audience.
- Build small scale models of the grounds highlighting new features or create models of the new features highlighting detail, such as a seating area with a canopy or an area to encourage the study of wildlife.

## Curriculum links

Involving children in the process of planning changes to the school grounds offers a number of curriculum link opportunities, for example:

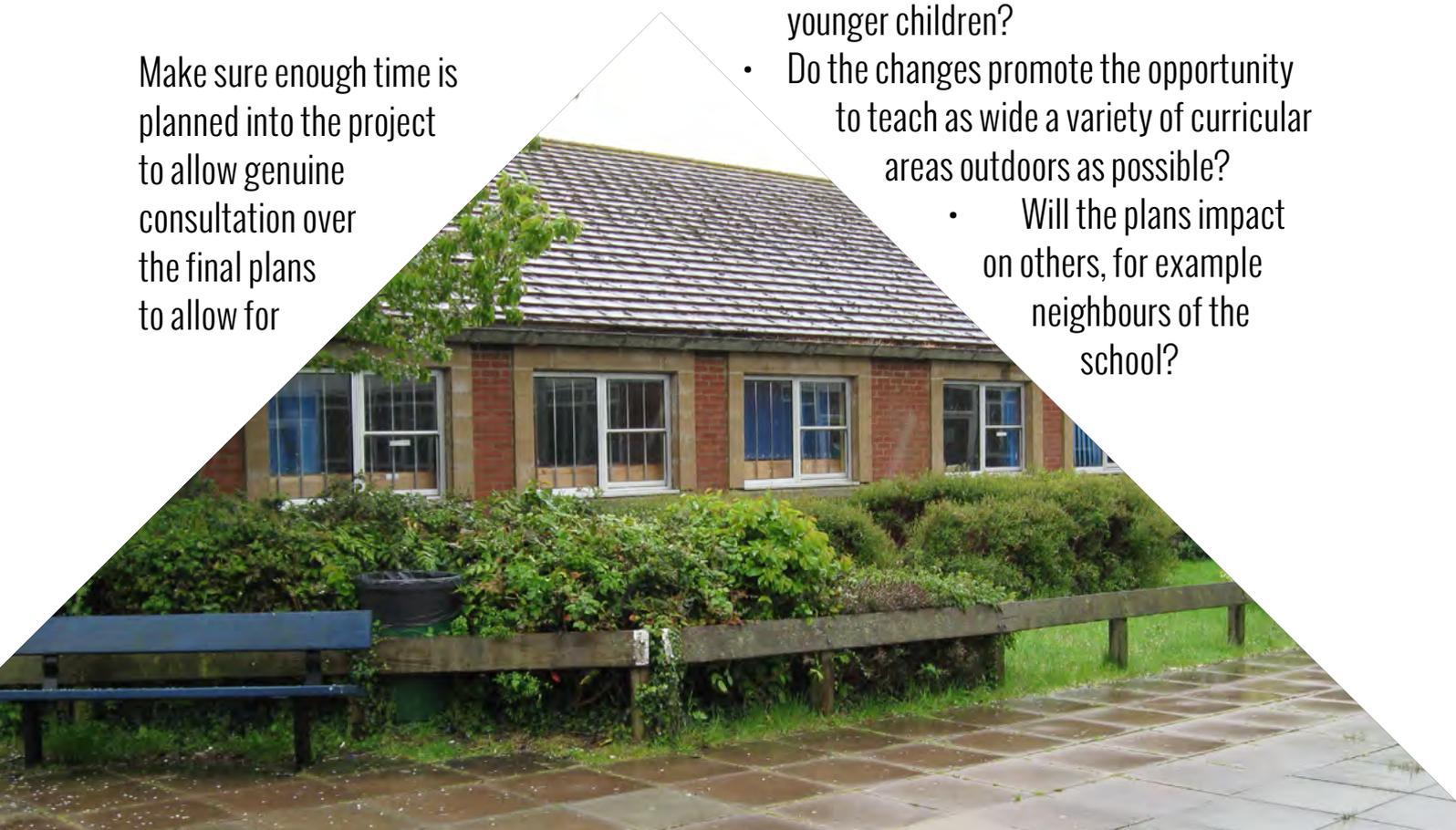
- Design and Technology.
- Art and Design.
- Literacy
- Information technology and computing.
- Health and Wellbeing - such as problem solving, decision making, negotiation and communication.
- Social Science - creating plans, looking at scale, investigating land use and human impact.
- Numeracy - scale, calculating lengths, areas and volumes of spaces. Estimating and calculating the cost of the design proposals.

## Finalising the design

Make sure enough time is planned into the project to allow genuine consultation over the final plans to allow for

changes to be made, and to be certain the school community is happy. It can take time to absorb the ideas and think over the consequences. Set up feedback sessions for staff, parents and community users, as well as children. A simple way to do this is a display board highlighting the final plan with a suggestion box for comments. In workshops, start by having small groups discuss the plan, and perhaps writing their comments on sticky notes, as this is more likely to uncover concerns. Prompt the group with questions such as:

- What will this be like in the winter / summer?
- What will happen to sports day if we make this change?
- Do the plans meet the needs of girls as well as boys? Quieter children as well as more boisterous children? Older and younger children?
- Do the changes promote the opportunity to teach as wide a variety of curricular areas outdoors as possible?
  - Will the plans impact on others, for example neighbours of the school?





Children in particular may be nervous of criticising the plans, but it's important to hear their voice. Try getting them to role play in small groups, taking it in turn to be the designer. Sometimes it is hard to see the link between the consultation process and the later physical changes, resulting in complaints that the needs of a particular user group have been ignored. This problem can be minimised by maintaining momentum throughout the project, involving everyone in the implementation phase and giving frequent feedback to the whole community about how the project plan is developing.

### **Making the changes**

Once you have identified a list of priorities and locations on your school grounds plan, decide what support you need to achieve your goals. Ask three questions.....

- 1). What simple improvements can the school community make, for example through a practical action day or through involving parents? What resources can be requested or sourced for free?
- 2). What resources can be simply purchased from a supplier and delivered to help support the improvement identified, for example a child accessible, outdoor storage unit?
- 3). What resources are you going to need external help to implement, for example from a landscape contractor, an artist or a

craftsperson?

When you have identified what the school community can do in terms of implementing the plan, divide the responsibility up.....for example is there an aspect of the project / a simple change that a class or year group could take on from start to finish as part of a related topic or as an enterprise project? Is there something that the Parent Teacher Association and / or Parent Council can be responsible for implementing? Is there an improvement project the local community could get involved with?

Following this period of consultation and reflection, you will have developed a prioritised list of ideas to help enhance a variety of play and learning experiences for children across all year groups, you will have identified the locations, you will have identified what the school

community can do and what you will need help with.....the last stage is to think about implementation.

Schools are busy places and even small change takes time. It's not possible to do everything at once and it's not possible for only one or two people to be responsible for implementation. One of the best ways to help plan changes over the short, medium and long term is to group the improvements into achievable timelines. What can be achieved NOW? What can be achieved SOON? What can be achieved LATER (with later being the next academic year, for example, because it will require more fundraising or specialist support or it's simply not an immediate priority). Set timescales that suit your school community. You may also need to link the

implementation of an identified improvement to a specific time of year, for example planting in the growing season. Considering the whole grounds does not mean that making changes has to be overwhelming, start small and build on success.

*"The most valuable resource is the community. Talking and building relationships will give access to a range of skills and materials from tree surgeons for natural resources to builders and surveyors for larger projects."*

Deputy Headteacher quotation

Part 7 of this handbook offers support and ideas with regards to maintenance and long term sustainability of the changes made.





# 5) EXAMPLES OF SIMPLE PHYSICAL CHANGES TO YOUR EXISTING SPACE

This part of the handbook highlights examples of simple physical changes to the spaces you might find in your grounds which were referred to in part 3.

*“Pupils benefit from planned regular and progressive outdoor learning.”*  
Deputy Headteacher quotation

## START SMALL

*“Don’t take on too much at once – little things all add up over time.”*  
Teacher quotation

Don’t be afraid to start small. Most school grounds have a small space that is underused, overlooked or simply under maintained. Whether it’s an unused corner, a courtyard area outside a classroom, a small copse of trees, an overgrown bushy area or even a site behind existing buildings – with a bit of imagination small spaces like these can become valuable spaces for learning and play.

As a starting point,

improving and developing a small space in your school grounds has many benefits. It is a good way to develop the confidence of the whole school community as it enables you to start small and then build upon an initial success. A small contained area could be a perfect project for a smaller group such as a school committee or a class if the whole community is not yet galvanised. It can also be a quick cost-effective method of improving the overall look and feel of the grounds whilst also enhancing the amount of learning and play space available to the children. These spaces often lend themselves well to quiet, calm, sedentary activities providing excellent social development opportunities for children. Any of the following advice tailored to specific grounds features could be used and adapted as part of a pilot small space re-development project.



# ENHANCING TARMAC SPACES

You will not want to lose the benefits of the flat open space and the blank canvas it offers but if a tarmacked yard is all that is available then it would benefit from being broken up and zoned more. Recycled planters such as tyres or pallets will add greenery and attract more wildlife. Consider growing tall plants such as grasses, bamboo, willow or shrubs to break up the field of view and add welcome cosy spaces to which children can disperse.

Often horizontal space is limited in older school playgrounds so vertical planting up railings, fences or walls can help with softening a harsh landscape. Equally mosaics, murals, mobiles or sculptures created by the children cheer up a boundary wall or fence without taking up valuable horizontal space. Your tarmac grounds have the potential to showcase some local distinctiveness based upon local heritage the design and the creation of such an installation is a great interdisciplinary learning opportunity.

You can use the elements to your advantage in a tarmac space with a few low cost, thoughtfully placed features. When considering the prevailing wind; turbines, flags, wind socks or wind chimes are all great

learning resources. They can add vibrancy and movement to the grounds and the pupils can even design, create and locate the items themselves. Water can be captured in guttering, pipes or other containers attached to fences. Such features can be used to learn about forces and motion or angles and will work just as well for balls if there is no rain! Hanging mirrors are a great way to reflect the sunlight and help make a small space appear larger. Sundials or solar panels would be a larger investment but valuable tools for real world learning in physical science.

Several of the curriculum based outdoor learning opportunities on tarmac already mentioned have referred to large scale modelling or recreation. A class set of loose materials such as wooden stumps, tyres, planks, inner tubes, wooden



pennies, sticks, tarpaulins, pallets and crates would provide ideal resources for those activities and many more. Refer to part 6 for more in depth information on loose materials.

Many school tarmac grounds have successfully included a performance area. At its most simple it is a platform made of a series of interconnected pallets. Many schools eventually opt for more permanent structures with: a stage back drop; posts and hooks to create shade, shelter or curtains and sometimes a public address system is included so that they can project sound outdoors.

Too often schools fundraise and invest large amounts of money in brightly coloured intricate playground markings. Whilst these may give a good outward impression of the school and be aesthetically pleasing

they are often abandoned by the children in favour of something less prescriptive. The best types of playground markings for learning and play are open-ended and multi-purpose. A blank grid square is useful for coordinates, data handling, multiplication tables, addition, subtraction and so on.

Two or more large circles are useful for gathering and organising groups, sorting and classifying activities and instant zoning of the space. Concentric coloured circles to create target zones can form the basis of many spelling games, number challenges or target practice for the launch of an airborne creation! Clearly sports court markings are extremely useful for overseeing numerous sports skills lessons however they can also be put to use for outdoor numeracy looking at measurements, areas or angles for example.



# ENHANCING OPEN GRASSLAND

Frequent issues with grass include: inaccessibility during the wetter months; problems with drainage and in terms of biodiversity frequently mowing a field restricts floral diversity and thus it becomes an uninspiring monoculture. Therefore, in order to enhance grassland the best approach is to first tackle any of these overarching issues.

If there is an area that collects water after rainfall then the practical but more expensive solution would be a soakaway. You may prefer to consider working with nature and planting native wetland plants to create a 'bog garden'. This has the added benefit of enriching the biodiversity of the area attracting invertebrates or even amphibians to use the site.

As an alternative to wetland plants, willow is a fantastic hydrophilic species of tree which will flourish in damp soils. It will help absorb excessive moisture whilst helping break up a space and providing shade or shelter. When willow rods are planted they are very flexible and forgiving and can be weaved most commonly into domes, tunnels, archways or fences but professional willow workers can create an array of living sculptures.

To increase accessibility to the grassland during the winter and ease pressure on

the tarmac, pathways could be created through or around the field's perimeter. Stepping stones, wood chip or gravel would all be relatively low cost solutions. Pathways could even be created on a more temporary basis by allowing the grass to grow longer in a certain area and then allowing the children to cut their own routes through.

Allowing a small section of grassland to grow long would be a great boost to biodiversity providing children with the opportunity to observe the local flora up close. In order to protect this area from excessive grounds maintenance invertebrate homes on fence posts can form an effective but subtle barrier to the sit-upon mower!

A more advanced approach would be to strip back the grass to bare ground and sow an area of wildflower meadow. The key to success with this is the preparation of



the soil, ensuring that there are no weeds remaining, no large rocks and the soil itself is raked to a fine crumbly texture.

The seeds selected should be native, taking

into account the soil type, aspect of the land and the local wildflower species. If the seeds are sown in late March/early April a later flowering meadow will be achieved which will only need one annual cut in September.

## ENHANCING TREE SPACE

To enhance pupil interaction with trees the first thing you may need to do is plant some - or plant some more! Look for native species and take a moment to see which species thrive in the locality. The UK currently has a number of initiatives offering free woodland tree packs.

A small area of woodland could be a valuable resource but should not be entered into lightly as this is a long term investment.

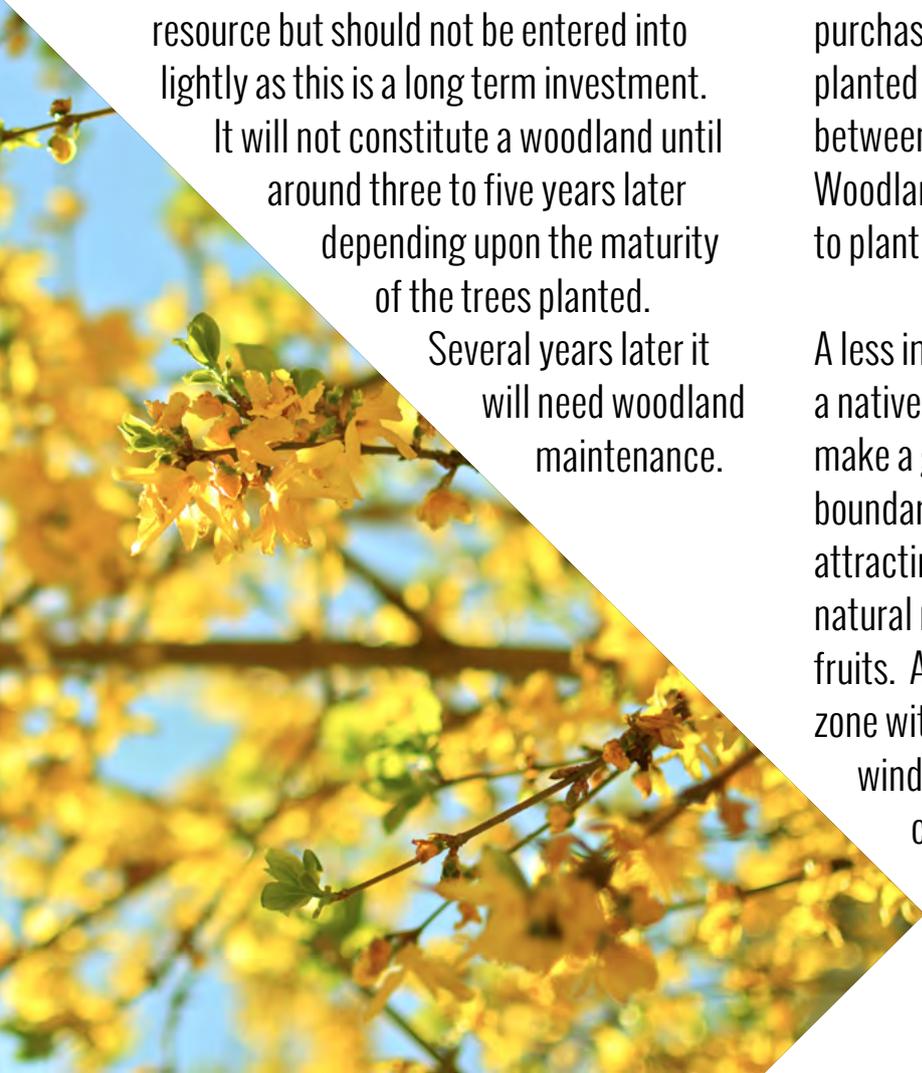
It will not constitute a woodland until around three to five years later depending upon the maturity of the trees planted.

Several years later it will need woodland maintenance.

Root systems may impact upon buildings nearby and it may lead to considerable shading. It is worth taking time to contemplate the most suitable site for woodland and have a long term plan in place for its care and protection.

The easiest way in which to purchase and plant trees is as bare-rooted whips. If purchased at this stage, they will need to be planted in the dormant season which falls between mid-November and late March. The Woodland Trust has simple advice as to how to plant trees.

A less impactful wooded habitat would be a native species rich hedgerow. Hedgerows make a great alternative to a man-made boundary and they have the added benefit of attracting wildlife and offering a bounty of natural resources such as leaves, nuts and fruits. A hedgerow can be used to create a zone within the grounds. They can act as a windbreak or some welcome shade. This can support the establishment of a suitable gathering area of pupils. A hedgerow is comprised from



a variety of bushier tree species and can be planted from bare rooted whips. However, the trees can be planted closer together i.e. 30cm between each tree in a single row or 45cm between trees in a staggered double row.

Trees can be a fantastic inspiration for rich literacy work. If children are struggling to find motivation with creative language then why not incorporate some vocabulary panels into the trees as a useful catalyst. The children could even be involved in helping create these designs. Trees can be celebrated with an array of creative adornments from garlands, to mobiles, to clay faces or knitted covers for the trunk. A more scientific slant towards additions to trees could be taken in the form of labelled panels explaining the processes of photosynthesis, respiration or the carbon cycle for example.

An area of existing woodland can be readily supplemented with shelter building materials to support the teaching of design and technology outcomes or to feed the children's imagination in their recreation of features from literature or history. Ideal materials include: tarpaulins in a range of sizes; transparent plastic covers; ropes; bungees, clips or other fixings, waterproof-backed picnic blankets and long hazel rods of at least 1.5m in length. Access to wood through loose materials is looked at in detail in part six.

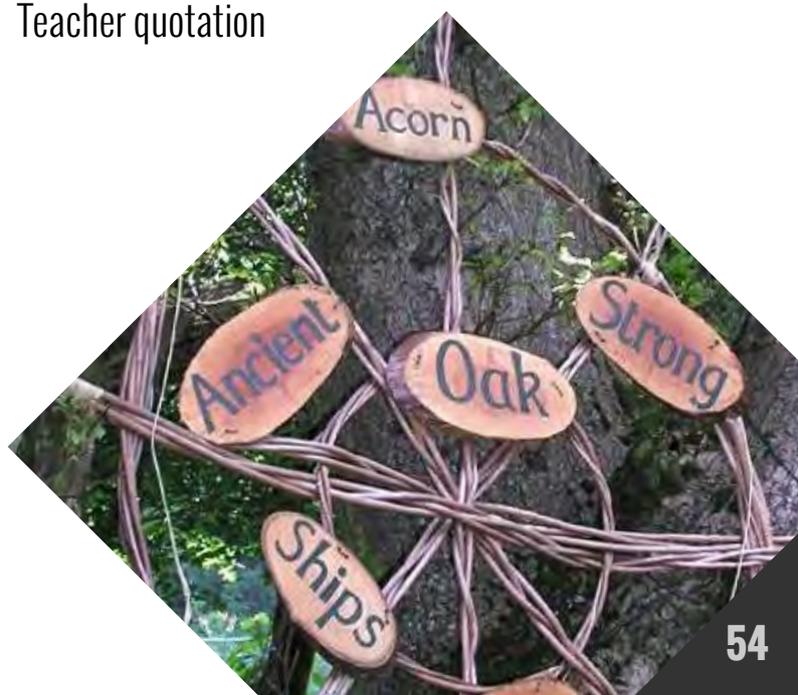
An area of trees would benefit from the addition of native woodland flower planting to demonstrate to children the different layers of a true woodland habitat. It would also be a useful learning tool in terms of different species of flower being adapted to grow in different conditions. More flowers will attract more pollinating insects too.

Any biodiversity attracted to the wooded area would require areas to shelter and nest. Log piles and man-made homes can substitute the lack of naturally occurring deadwood or hollows in trees.

A clearing in amongst trees could be the chosen site for a class gathering space given the natural protection afforded by the canopy. Fallen logs or wooden stumps sitting in a glade would permit a class to have instant access to the trees for learning outcomes.

*“Learning in the woodland will plant an attitude of care for the world.”*

Teacher quotation



# ENHANCING GROWING SPACES

If a growing space is going to be used to its full potential in a school then there are several things to consider:

## *Plan for usage within long-term teaching plans*

For the most successful crops it is better if beds remain under the control of the same stage each year e.g. having an early level bed, a infant bed and a primary bed. This way the rotation of crops can be monitored and the children will experience the benefits of harvesting the crops which they sowed. Some schools have gone a step further and have decided that each bed has a stage-based theme. This could vary from soup, smoothies, curry, crumbles to salad. If the school knows what theme each year group will experience then this allows for more progressive planning as to how each class will engage with the growing space. It also means that each teacher can be clear on their contribution to the area so that it is not left to one keen individual.

## *Plant with the summer holidays in mind*

Do not select produce that will be ready to harvest during the school holidays and also consider who will maintain any crops when school is closed. Volunteers may need to be recruited from the local community.

Mulching and slow irrigation systems can help with water retention.

An orchard would be an ideal addition given that it is relatively low maintenance over the summer months and the harvest generally arrives as children return in the autumn term.

## *Keep it small and manageable*

Containers are a more manageable option for growing although extra watering may be required in dry periods as pots, hanging baskets, troughs etc are more prone to water loss. Be innovative in your choice of planters: hessian sacks, tyres with a membrane lining, pallets, wellies or old bread crates. Ensure that you have added drainage holes and a layer of rocks, crockery or sand to aid drainage. Small containers have the benefit of being transportable so pupils could take plant containers home to care for/enjoy over the summer holidays.

Intersperse crops with hardy perennials or plants that provide good ground cover and even set aside some areas for nature to



recolonise to cut down on the actual space to be maintained vigorously.

Go vertical with climbing plants trained up walls or fences such as beans, peas, tomatoes or raspberries. Sunflowers are a popular option for school growing competitions.

### *Accessibility of the area*

From the outset the growing area needs to be in the right spot in the school grounds. It will require regular sunshine whilst being protected from the prevailing wind. The area needs to be accessible for a whole class. Consider that a raised planter rarely accommodates a whole class so what is the rest of the class going to do whilst only a small number of pupils are engaged around the planter?

Are there work surfaces available for planting seeds, splitting seedlings or other garden tasks?

If there are children with physical disabilities, is the area inclusive of their specific needs?

A multi-purpose area including handwashing facilities and even somewhere to prepare and eat garden produce would be perfect.

### *Accessibility of gardening resources*

A fully functioning growing

area needs nearby access to water whether that is a water butt, an outdoor tap or home-made water collectors. A compost bin and wormery will support the sustainability of the site and provide a rich learning resource.

As teacher confidence builds and the growing area becomes more frequently used then an outdoor area for propagation may be more of a necessity. This could be home-made cloches, a green house or even the investment in a poly-tunnel.

It is advisable to store gardening tools next to the growing area too. A shed, outdoor cabinet or chest would all work well. Regarding tools for children, do not be fooled by the false economy of inexpensive colourful child-sized tools as these will not last if used for any real gardening! It is better to invest in higher quality, sturdy tools which are proportioned for children.



## *How will the produce be used?*

There are many exciting plot to plate schemes happening across Scotland in which pupils have involved the kitchen staff and incorporated the produce from the growing area into school meals.

Equally the produce could be sold or used in recipes for upselling as part of enterprise projects with the income generated being reinvested in the garden.

## ENHANCING WILDLIFE SPACES

If the grounds are lacking biodiversity but there is not the spare horizontal space to create a wildlife area, some schools have looked to their roofs or walls instead. Green walls and green roofs involve a technical installation but they could present a rich resource for studies.

A simple unstructured wild area can readily be enhanced by thinking more strategically about the types of wildlife the school would like to attract and considering a mosaic of different micro habitats to suit different species. Such a decision can be informed by knowledge of the wildlife which already exists locally eg. if there is water nearby it is likely that the school could be made more welcoming to amphibians. Or if there are private properties with gardens nearby then the school could help support local populations of birds or insects.

Water can be provided in school grounds as a bog garden, as a container pond or even a

much larger excavated wildlife pond. Part 6 gives more details about bringing water into the school grounds.

If the decision is taken to include a pond then it is important to consider suitable planting in and around the pond to maintain its health and attract more biodiversity. Pond planting generally comprises floating, oxygenating species; some submerged species and some marginal plants emerging around the pond perimeter.

In addition to give the pond the best chance of attracting a local amphibian population then a hibernaculum should be sited not too far from the water source in order that aquatic organisms have somewhere suitable to hibernate and feed during the winter months.

With time, birds will be attracted by permanent feeders as long as their location is not too exposed, there are bushes available to



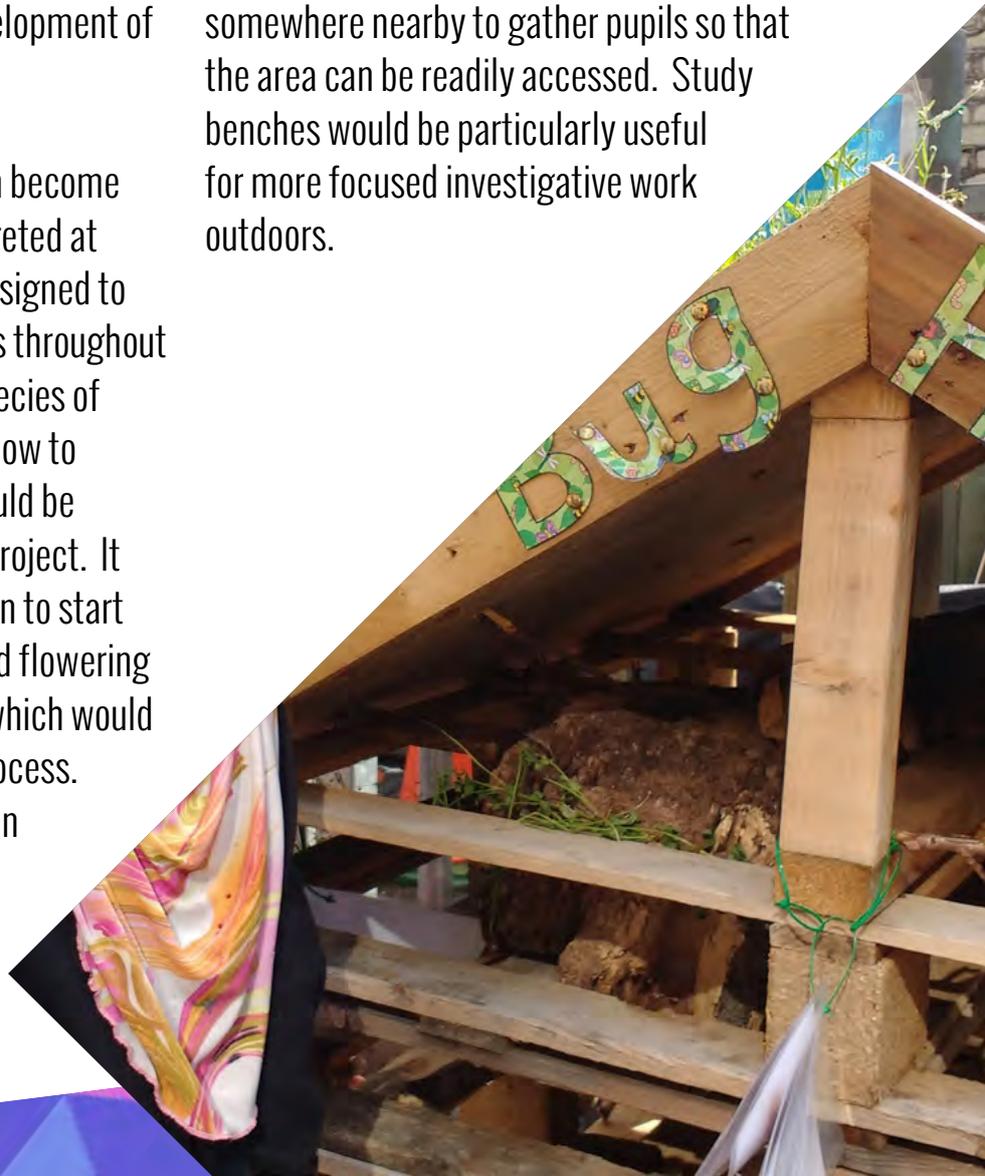
retreat to safety and the species adapted to feeding at particular feeder types are already present in the area.

A permanent feeder can make up part of a more bird-focused feature. A bird feeding station would have a variety of feeders to suit insect eaters, nut eaters and ground feeding species. It would offer a supply of fresh water for birds' drinking and bathing needs. In spring the area could offer a supply of suitable bedding for nests such as an old teddy bear attached to a tree and cut open so that birds can remove the stuffing. Some schools have even added a bird box close by with an incorporated webcam so that pupils can study the behaviour and development of the residents.

The planting in a wildlife area can become more specific to the locality, targeted at attracting certain species and designed to ensure pollen and nectar supplies throughout the seasons. Identifying local species of plant and animal and looking at how to attract them into the grounds could be the basis of a great biodiversity project. It would also encourage the children to start researching the requirements and flowering times of different plant species which would support their decision making process. There is also the design element in the aesthetic of the area and incorporating a range colours, heights, shapes and textures.

Of course the flowers provide the food for any local insect populations but it is always important to incorporate shelter and nesting opportunities in conjunction with pollen and nectar supplies. Hedges, dead wood, log piles, rockeries and man-made invertebrate homes can all offer shelter and nesting. Many ambitious schools choose to take on the challenge of creating a large scale 'mini-beast mansion' using pallets, plant pots, hollow stems, bricks, cardboard and other recycled materials.

A diverse mosaic habitat offers such a wealth of outdoor learning opportunities that the logical step would be to ensure that there is somewhere nearby to gather pupils so that the area can be readily accessed. Study benches would be particularly useful for more focused investigative work outdoors.



# ENHANCING GATHERING SPACES

Part one provides details on starting out with a gathering space and offers a number of temporary solutions. If the budget is there to adopt a more permanent solution then this can be provided by a whole host of natural features from logs to boulders to stumps.

There are more formal options such as linear benches or even picnic benches with integrated shading. It is equally possible to provide temporary shelter by means of tall boundary posts around a gathering space to which a tarpaulin or sail could be fixed.

Some teachers like to have a surface to write upon even outside and a backboard or an outdoor whiteboard can serve this purpose well. The facility to install a washing line can also be invaluable as this will enable teachers to peg up visual reference material. It is also a good way of keeping materials centrally or even for displaying work at the end of the session.



# 6) EXAMPLES OF MORE COMPLEX GROUNDS CHANGES TO SUPPORT OUTDOOR LEARNING

This section of the handbook focuses on building the confidence of staff making good use of the outdoor space for learning. It provides details, ideas and support in introducing and sustaining more adventurous features to enhance learning experiences for children of all ages. In part seven you will find advice and support regarding maintenance and the long term sustainability of these resources.

With more adventurous features, it is important that you have the paperwork and procedures in place to demonstrate your rationale for having them available and how you will manage and maintain them long term. Also, consider how your approach is shared throughout the school community and how the benefits and value linked to children's learning and development are communicated.

The risk benefit analysis process is the ideal approach to adopt.

There is more information on this in part two. The important thing about a risk benefit assessment is that it is an active document which has been populated with the comments and feedback of all relevant people. It should be

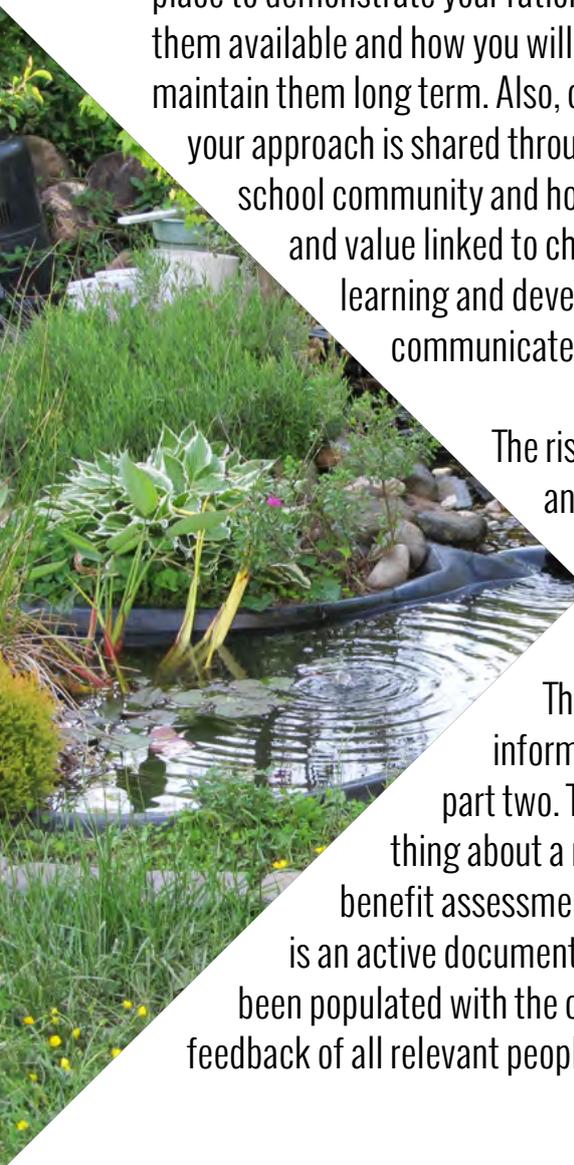
reviewed at least annually.

Staff should also be encouraged to undertake an informal dynamic risk assessment each time the children access resources. A dynamic risk assessment is simply an observation based decision based on the environment or the activities on any given day, for example if it was very windy on a day when outdoor learning in the local woodland was planned, then a decision would be made to postpone the visit as the risk of being amongst trees in the wind would be much greater than the benefit of the activity. Similarly, accessing loose materials in inclement weather.

The examples given in this section follow the holistic, participative and sustainable approach that is key to success and include access to loose materials soil and mud, sand, flowing and standing water, accessing wooden parts and learning in local greenspace.

*“Teaching outside gave me a new lease of life - you have to be creative”*

Teacher quotation



# (a) LOOSE MATERIALS

## (i) Background

Loose materials are parts that can be moved, carried, combined, redesigned, lined up, and taken apart and put back together in multiple ways. They can be naturally occurring, construction-based or scrap.

Through the use of simple, inexpensive equipment that is not restricted to any age group or any one type of space outdoors, staff can provide the opportunity for a wide range of cross curricular learning as well as proven links to whole child development as follows:

- Promotion of risk assessing, resilience and responsibility.
- Enhancement of communication, cooperation and negotiation skills.
- Provision for higher order thinking and problem solving.
- Enabling active learning
  - Promotion of creativity and imagination.

Engaging pupils with a sustainable practice.

Objects can be considered in terms of their

affordances that is to say the number of potential uses of that object. Natural materials frequently have more affordances than manmade items. (Gibson, J. (1979) *The Ecological Approach to Visual Perception*) Compare a toy car with a stick. What are the affordances of each resource?

A car will always be a vehicle and by definition limited, but a stick raises a multitude of questions and infinite ideas. Stop and consider how many ways a stick could be used!

Consider building a tower with Lego. No matter what the size of the blocks, a tower is created with ease once the connecting system is ascertained. However, if the same activity is attempted with a pile of stones there is no one right way, but through problem solving, higher order thinking and perseverance, a tower can be achieved!

At this point it is important to mention that loose materials work best in those schools which take a holistic approach to their adoption. This means that the materials are freely available for the pupils during playtimes and equally used by teachers during formal learning. Not only does a good quality playtime have a positive impact on the learning back in class but also any



practitioner who takes the time to observe their children interacting with loose materials during their playtime will have a better appreciation of the fluid nature of play and learning.

## **(ii) Introducing loose materials**

The first step is to source a class set of suitable loose materials. Whether purchasing materials or gathering for free, variety is the key! Ideally, look to source a range of: longer term materials such as plastic piping and guttering; medium term materials like wooden planks, wooden discs and tarpaulins; short term materials including cardboard, seasonal materials or chalk.

Involve the whole school community in

requesting donations, for example: send a flyer home from the pupils; write to local businesses; contact a local tree surgeon; contact the relevant department at your local authority; display a list on the staff room wall for staff contributions; ask the local community; visit the local recycling centre and so on. Then organise a targeted fundraising event with all proceeds being used to purchase any materials that you haven't been able to source for free.

Not sure what to source? Here is a list of loose materials all of which have worked well in school grounds. This list is by no means exhaustive, but it gives you a good place to start.

- **Wooden pennies (slices of wood about 3 inches thick)**
- **Water**
- **Wooden logs of different heights and widths**
- **A variety of lengths of wood and wooden planks**
- **Sawdust**
- **Chunky chalk**
- **Straw bales**
- **Sit upons made of foam (with / without a carry handle) or cut up foam yoga mats / camping mats**
- **Picnic blankets with waterproof backing**
- **Waterproof cushions**
- **Sheets, blankets and various materials, e.g. jute**
- **Tarpaulins (various sizes and colours - big, small, green, blue, transparent etc)**
- **Velcro straps**
- **Willow or Hazel rods / poles**
- **Cardboard - various sizes and shapes**
- **Ropes and Paracord**
- **Leaves, feathers, shells, gravel, pine cones**
- **Stones / pebbles / cobbles**
- **Milk crates**
- **Wooden pallets**
- **Hosepipe**

- Camouflage netting
- Tubes, guttering and funnels (plastic or bamboo)
- Tyres - bicycle, car and tractor
- Planted willow fedge (a fence / hedge) - a sustainable way of growing willow to harvest for future use whilst also disguising boundary fencing
- Sticks - various lengths
- Fence clamps and hooks
- Large shallow tray
- Trolley(s) on wheels to aid tidying up, e.g. garden trolley / sack trolley, tub truck trolley, bread crate trolley, large metal trolley or small trolley
- Wheelbarrow
- Baskets for collecting / transporting
- Flexi tubs to help with storage
- Sand (and small resources for sand play and maintenance - including sieves, buckets, spades, trowels, a riddle, long handled brushes, rakes, bowls, spoons, small world figures, jugs etc)
- Resources to enhance small world play, for example mini figures, dinosaurs and vehicles
- Air drying modelling clay
- Buckets
- Wooden cable drums

The availability of adequate, child accessible outdoor storage is very important, not only to store your materials, but also it is important that the children are involved from the outset with self selecting and helping to tidy away.

There are many options for storage. Start by auditing your needs based upon the security and size of the grounds and whether there is

existing storage available.

Some schools already have outdoor storage and have managed to make better use of it by reviewing what is currently stored there, recycling unwanted resources and re-purposing the unit for loose materials provision with the addition of a shelving unit and hooks (both on the inside walls and to hold the doors open). Other schools have adapted a spare space for storage purposes, for example erecting a metal grill and gate in part of an existing shelter.

If the grounds are secure then you might consider a smaller unit to store some materials whilst others are left out.

Alternatively, several schools have



installed open, wooden bays to help keep resources in one place whilst ensuring that they are still easily accessible when needed.

If the grounds are small, consider multifunctional storage. If you are going to lose valuable outdoor ground space to a shed (or something similar) make it as play friendly as possible. Examples include: painting the outside with themed designs; converting one side into an outdoor blackboard, storing resources on trolleys so that once they are wheeled out the shed interior can be used for play; adding an extension to provide a gathering area or adding a green roof to enhance biodiversity.

If your grounds are large, consider one large unit with trolleys inside to help move resources to different locations, or one large unit and several smaller units (for example low chests) at various locations.

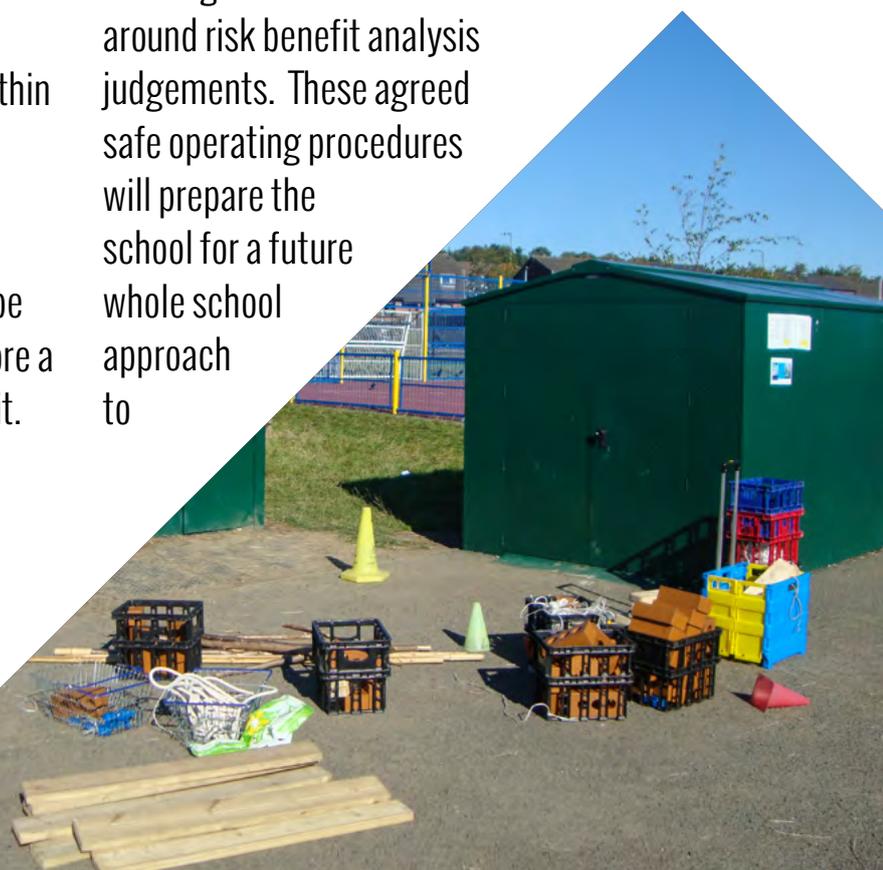
If you regularly experience vandalism within the schools grounds, consider a sturdier material such as metal for the storage unit, disguise your storage (for example bench seating with hinged lids that can be padlocked) or check if it's possible to store a unit on wheels indoors adjacent to an exit.

Storing materials in wheeled trolleys, baskets, plastic boxes and tubs not only helps with organising the inside of your storage shed, but also helps aid tidying up time. If possible

chain and padlock tyres to a boundary fence as they take up a lot of room in a shed!

Even though, loose parts work best when they are freely available to all children during their leisure time as well as for formal learning, one of the best ways to introduce the materials is in fact through class time. When teachers and supporting staff step back and watch free play in action everyone sees the advantages - the children have fun, the support staff gain confidence through experience and the teaching staff and senior management observe teacher free learning. Staff can make more informed decisions as to how materials can be used to best support curriculum work by watching how to group interacts with the resources.

The class responsible for the introduction of the loose materials can take a lead on devising a code of conduct based around risk benefit analysis judgements. These agreed safe operating procedures will prepare the school for a future whole school approach to



loose materials. Examples might include avoiding wrapping each other in tarpaulins, avoiding tying rope around people, keeping tyre stacks to three high and only using trolleys to transport resources - not people!

Communicate with parents both before and after the initial introduction, using images of the children interacting with the resources and positive feedback quotes.

### **(iii) Curriculum links**

As well as all the wider benefits to children's physical, emotional and mental health and wellbeing, access to loose materials in the school grounds offers a wide range of cross curricular opportunities outdoors.

#### Languages

Loose materials are great for resourcing role play, re enactments, recreating scenes from stories or even setting the scene to inspire new imaginative writing.

#### Science, Technology, Engineering and Maths

The materials can be used to demonstrate understanding of many areas of mathematics such as angles, shape, symmetry or scale. They equally lend themselves well to exploring forces particularly friction and air resistance. Construction challenges such as catapults, bridges, tall structures or waterproof shelters are all rich technology learning opportunities for pupils.

#### Expressive Arts

Transient art using air drying clay, chalk, natural materials (such as sticks, pine cones, leaves and seeds) is very effective. Larger loose parts could be employed to create a dramatic stage for outdoor performances. Perhaps the children could be challenged to create an outdoor symphony using loosing parts as impromptu musical instruments.

#### Other curricular areas

Many schools have used loose parts to support history topics through the recreation of Viking long boats, war time shelters, fortresses to name a few. They could also be deployed to help construct models of geographical features such as a river or even the layout of different places of worship.



## (b) SOIL AND MUD

### (i) Background

One of the features most outdoor spaces have in common, particularly at certain times of year, is the availability of mud. Whether it's appeared as a result of erosion or because drainage is poor in certain areas, many schools view mud with concern and actively encourage children to avoid it citing reasons such as the risk of getting dirty and health and safety issues.

Throughout this resource we have focussed on making the most of what you have, as well as making simple changes to support learning. Soil and mud are natural resources that children come across regularly in their daily lives and offer a range of outdoor learning opportunities, as well as a sensory experience that can be used to support children with developing basic life skills such as good hygiene and hand washing.

### (ii) Working with soil and mud

Before we explore the potential learning opportunities of mud it's important to acknowledge that particularly muddy areas of the school grounds, for example areas that experience heavy and frequent footfall, are often perceived as barriers to taking learning outdoors or to accessing specific spaces. In this case there are some simple changes that can be made to reduce the impact and enhance year round access.

- Trial shoe changing - different footwear for indoors and outdoors.
- Request donations of uniform at the end of the year and retain a proportion of lost property clothing if unclaimed to be used as spare clothing.
- Work with parents to find a solution for the benefit of all, for example requesting that parents provide their child with a pair of wellingtons. Or run a school fundraising event specifically to purchase outdoor clothing for staff and children.
- Agree and mark out a change in the mowing regime to allow grass to grow longer in specific areas as this will be more resistant to erosion.
- Purchase and peg down grass reinforcement rubber matting, followed by soil and grass seed. Grass grows through whilst the matting reduces erosion and supports ground stability. Mats are often supplied in square metres and with pegs.



example of  
a mud kitchen

- Embed wooden stumps into the ground at varied heights to create access across a muddy space these will also support enhanced physical literacy.
- Add pea gravel to flat muddy areas as an inexpensive surface
- Lay paving slabs to create flat stepping stones.
- Create a simple path bordered with timber edging and lay weed suppressant membrane underneath a surface such as pea gravel or recycled rubber chippings.
- Work with a professional to create a raised boardwalk over a larger area of mud.
- Purchase barrier mats for school entrances to collect dirt from shoes.

### **(iii) Curriculum links with soil and mud**

#### Languages

Mud is such a fabulous substance to inspire the usage of more descriptive words it could be used as the basis of poetry or even functional writing for mud pie recipes.

#### Science Technology Engineering and Mathematics

Mud can be a useful construction material and its properties can be changed by adding water, sand or clay. Mud can be analysed in terms of its constituent parts and what implications this has on drainage or planting. It can also be a medium for the study of

weight, volume and measurement. You could use some of your mud mixed with clay and wildflower seed to create wildflower bombs.



#### Expressive Arts

It provides a temporary painting material for different outdoor surfaces or as a basis for sculptures that encompass over loose natural materials.

#### Other links

A muddy patch could be an ideal spot for an archaeological dig, scale modelling of trench warfare, modelling miniature versions of geographical features or even for learning historic building techniques. Some schools really commit to mud and create a mud kitchen.

The principle of a mud kitchen is a fixed area with kitchen-themed resources that supports children's learning and play through hands on, practical experiences. It is cheap to establish and sustain.



### (i) Background to sand

The fundamental softness of sand creates a very different kind of space from tarmac or grass.

It's hard to run in a sandpit and so they tend to be a more peaceful, reflective, co-operative and creative space.

The sensory benefits of being able to immerse yourself in sand, rather than standing around a sand tray or leaning over into a sand box should not be underestimated. Schools do not need a lot of money or access to machinery to incorporate sand as a play and learning resource outdoors.

Accessing sand outdoors is associated with a wide variety of benefits for children of all ages:

- Gross and fine motor skills are developed through digging, constructing, carrying and jumping.
- Social and co-operative skills are commonly developed as children work together on joint projects - building a fantasy world, creating a water channel, negotiating whose turn it is with a particular resource and so on.

- Sand provides a good context in which children can build an understanding of risk management for example agreeing not to throw sand and the reasons behind this.

### (ii) Introducing sand

Creating a temporary beach is low cost, great for small grounds and transportable. Simply add good quality play sand onto a large tarpaulin. After the activity the children are encouraged to brush the sand back onto the tarpaulin and the corners of the tarpaulin are gathered and tied together.

Create a sand-shed by converting a wide, wooden shed with double doors for example a bicycle storage shed. Attach a wooden plank at the front on the inside to create a lip to keep the sand inside. Lay plastic sheeting on the floor of the shed and cover with good quality play sand. Make use of the vertical surface to hang associated resources such as trowels, sieves and buckets.

Add play sand to tarmac and surround the area with logs or tyres to keep the sand in place. If you are doing this on grass it would be worth removing the turf and laying a weed suppressant membrane underneath the sand to avoid re growth. Consider the location carefully, for example avoid areas of poorly drained soil and areas of tarmac where water collects after rain.

Convert an underused or under maintained existing feature, for example a large raised bed, into a sand area.

### **(iii) Curriculum links to sand**

#### Languages

Sand is an appealing, transient writing surface for practising letter formation, spellings or other linguistic techniques. It can also inspire the imagination as a novel context for the setting of stories, poems or plays.

#### STEM

Mathematical concepts can be supported through experimenting with volume, mass,

and flow using standard volume measures as well as non-standard volumes such as cups or buckets. Science and engineering can be studied through experimenting with the properties of wet sand versus dry sand and construction challenges. It could also be a novel context for a temperature differential investigation between sand in the sun and sand in the shade.

#### Expressive Arts

Creativity is developed through this rich stimulus: sand castles and sculptures; sand cities; roads for toy cars; twig structures; tunnels and fantasy worlds. These are often enhanced with the addition of other props such as small world resources, sticks, shells and pebbles.

#### Other links

Sand is a great modelling resource for geographical features such as rivers or volcanoes and it could equally be used to sculpt historical features such as castles, trenches or settlements.



## (d) FLOWING AND STANDING WATER

Apart from the need to water plants, access to a water supply outdoors has benefits for outdoor learning and can support access and use of the materials mentioned already.

If possible install an outdoor tap on the side of the school building. To reduce the likelihood of vandalism and misuse, many schools incorporate a vandal resistant tap head, they cover the tap with a protective case or ensure that the water supply to the tap can be controlled from inside the school building.

If it is not possible to install an outdoor tap, there are other ways to create access to water when required, for example a hosepipe attached to an indoor tap, cutting off the bottom of plastic bottles (leaving the lid on) and attaching them upside down on the fence to collect rainwater or creating a tippy tap.

### **Curriculum links**

#### Languages

Water can be a stimulus for creative texts and richer vocabulary. Water is such a vital

part of our existence that it can be used in context to help children reflect on the lives and experiences of those with limited access to fresh water.

#### STEM

The water cycle is a fundamental aspect of science studies and it can be observed in the real world using water rather than labelling a diagram in a classroom. The direction, speed and flow of moving water can all be measured within the context of water being an energy source. Water is vital for the cultivation of plants so investigations around water retention, irrigation techniques and drainage could be conducted with older pupils.

#### Expressive arts

Water can be used for transient art or it can be frozen and used for ice sculptures. Pressed flowers and leaves can be encased within a frozen mould and then used as wintery decorations for trees or railings. The sounds of water can be studied and used to inspire musical compositions.

#### Other

Model lakes and river features for geography or explore the impact of water on eroding different materials in the school grounds.



## (e) PONDS

### (i) Background

For some schools, creating access to standing water in the outdoor space is more difficult as the grounds are accessible in the evenings and weekends or vandalism is an issue. Those schools that have incorporated standing water into their grounds have not only created a valuable outdoor learning resource, but also a resource that is of great benefit to wildlife and biodiversity.

There are a variety of ways in which standing water can be incorporated into the grounds. It doesn't have to be expensive or complicated and in some situations can result in making use of spaces within the grounds that are otherwise underused or avoided.

### (ii) Introducing a pond to the grounds

A simple grounds change, that can be undertaken by staff and pupils, is easy to maintain and has great benefits for wildlife is the creation of a bog garden. Identifying a boggy or wet area of the grounds that is underused for that reason can be

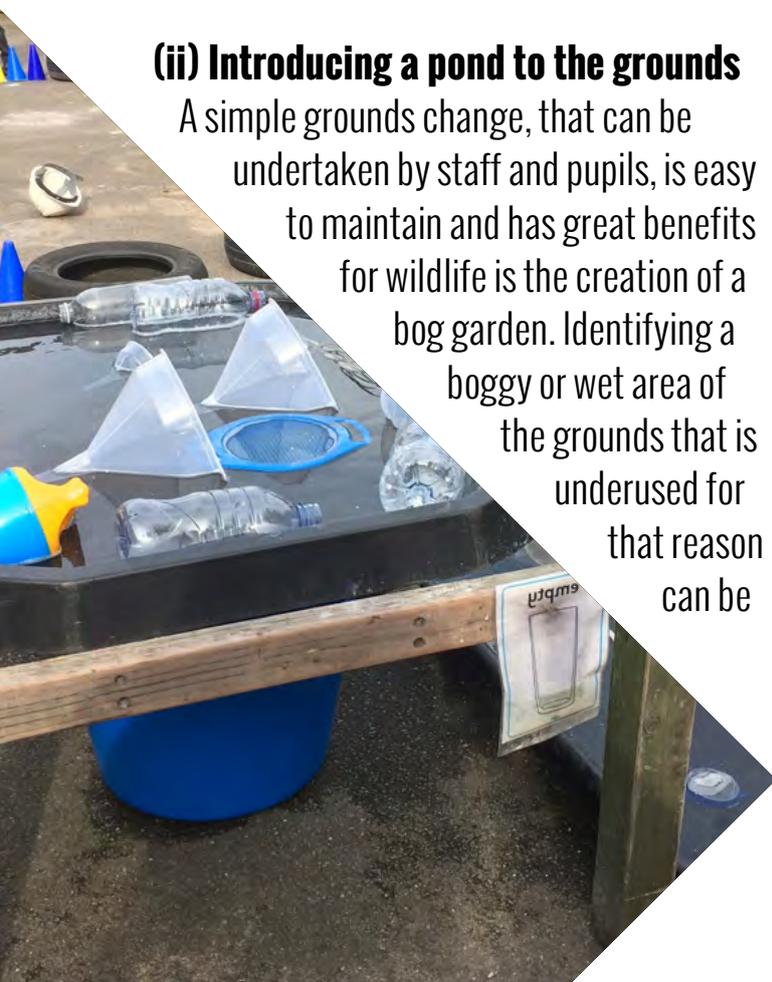
seen as an advantage in this situation by capitalising on the existing wet ground to help create your bog garden. There are lots of simple online guides focussing on how to create a bog garden with support from staff and pupils - see the glossary for examples.

The process of designing, researching and sourcing appropriate planting for the bog garden and then its practical creation is a rich learning experience in itself.

Another advantage of creating a bog garden is the fact that the resource requires minimal maintenance which can be undertaken by pupils. Ensure the ground remains wet in prolonged dry conditions and at the end of the growing season thin out any plants that are starting to take over the space and out-compete other species.

There are three basic ways to create a wildlife pond in the school ground, depending on local factors and the space and budget available.

A simple and cheap way for staff and children to create a mini wildlife pond is to make use of a plastic washing up bowl (or similar sized container), stones and a variety of oxygenating plants, for example:



On a slightly larger scale, and requiring a little more money, create a pond in a half wooden barrel, for example. Line the barrel with PVC pond liner stapled around the rim at the top to ensure the container is waterproof.

If space and budget allows, the creation of a permanent, landscaped pond will reap rewards for both school and for biodiversity for years to come.

If considering a permanent pond, check with your local authority regarding any policies or procedures you need to adhere to and involve the pupils at every stage, for example investigating and agreeing the best location for the resource and in its long term maintenance.

Choosing the right location for your new pond is important. A pond sited away from the main play space outdoors will help to attract the wildlife that makes a pond such a useful educational resource. However, you don't want to spend too much valuable outdoor learning time accessing the pond. One which is out of sight is also more likely to be neglected. If security is a significant issue, locating the pond in an enclosed courtyard can be a solution. Try not to have a pond beneath trees or larger bushes since it will soon become filled with fallen leaves which need to be removed.

It is vital to fill your pond with a natural source of water, the best being rainwater. Unfortunately tap water contains nutrients that can encourage rapid algae growth. Algae blooms can use up available oxygen and reduce the amount of sunlight received by other plant life. If only tap water is available leave it outside to stand for a few days to allow some of the dissolved gases to evaporate and then add small amounts at a time to allow the pond to adjust. This also applies to existing ponds that need topping up.

## **Curriculum links with ponds**

### Languages

Ask the children to spend time at the pond area recording what they see and how the area makes them feel. They can then translate this into poetry. Take story time out to the pond and read stories with a particular focus on wildlife and water. Give children the opportunity to create their own stories about the pond and then share them in that setting.

### STEM

Pond dipping can be the basis of many scientific



investigations for example getting to grips with invertebrate classification using a scientific key, looking at how many species live in your pond compared to another body of water, or looking at the life cycles of the different species found there.

Pond building offers excellent opportunities for work on areas, distances and prices. Children can mark out the size of the pond required by using string and small wooden pegs. Working with string and metre rules to criss-cross the marked site they can then work out its area.

### Expressive Arts

Make models of wildlife from the pond using clay or recycled materials. Study the reflections in the pond as a basis of watercolour art work. Pond life could even become an inspiration for dance, movement and drama, for example the life cycle of a frog.

### Other links

Discover how ponds have been used throughout history and the different types of ponds that there were. Locate old ponds in the local area, are they marked on local maps? Hidden objects are often unearthed when digging out a pond. Fragments such as pieces of crockery and other curiosities can be collected, washed and then children can have fun trying to identify them!



## (i) Background

Loose or fixed wooden features such as fallen trees, large logs, poles, log stumps and wooden discs offer a huge range of possibilities for outdoor play and learning, both in school grounds and in local green spaces.

### Examples include:

- Fine and gross motor skills are developed through climbing, jumping, balancing, carrying and rolling.
- Creativity and imagination is more stimulated by natural non-prescriptive materials.
- Loose wooden parts promote child-led activity enabling children to temporarily adapt the existing environment to suit their needs.
- Wood is a direct connection with the natural world. It has tactile and sensory properties not associated with traditional plastic toys or metal resources.

It may even be covered with further interesting features such as mud, moss or lichen.

- Children often need to work together on joint projects manipulating larger pieces of wood thus strengthening communication and cooperation skills.
- Opportunities to risk assess and develop resilience - learning the difference between the properties of wet and dry wood when climbing or balancing, learning to correctly handle heavy or awkwardly shaped resources, testing boundaries and taking responsibility for yourself and others around you.
- Promotion of recycling - making the most of a naturally occurring material that children come across on a daily basis in a variety of forms.

## (ii) Introducing wood to the grounds

The table includes some examples of the type and size of loose wood worth introducing into the school grounds:



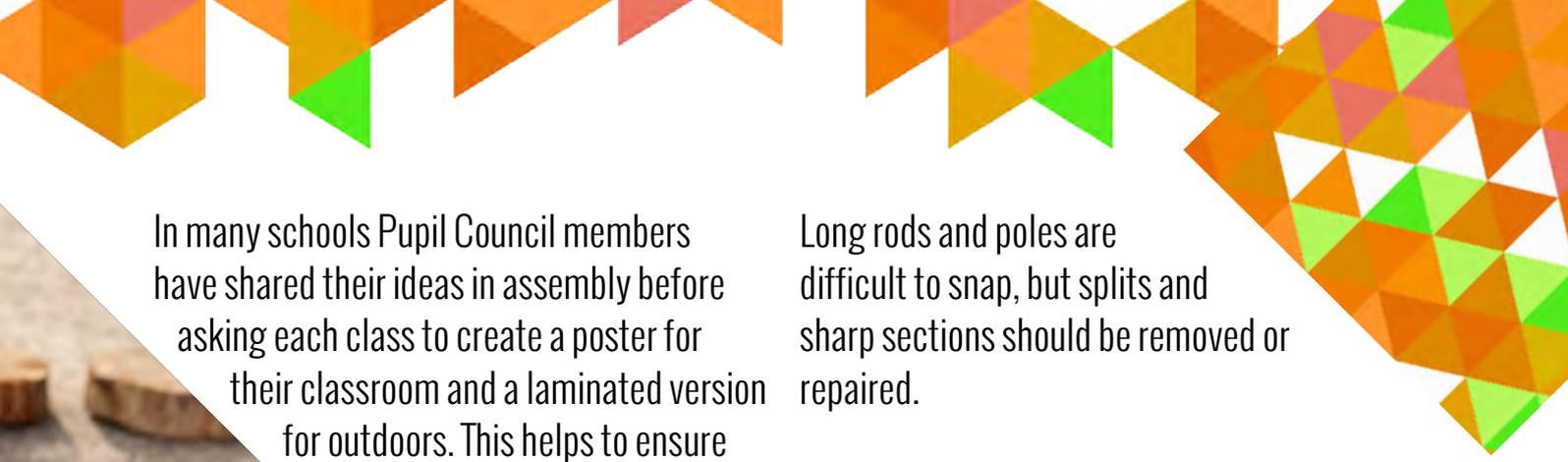
Wood Resource	Approx. Dimensions	Notes
Wooden discs (sometimes called pennies, coins or cookies).	3 to 4 cms thick and 20 to 30 cms in diameter.	3 to 4 cms thick and 20 to 30 cms in diameter.
Wooden stumps	30 to 45 cms diameter and 30 to 40 cms tall	Choose the species with advice to avoid heavy sap or excessive degradation.
Wooden rods or poles (for den building, for example)	1.5 to 2metres long and 4cms diameter	Hazel or willow are ideal, but any hardwood that is straight(ish) would do. Sourcing rods or poles (as opposed to branches of any shape) is limited to a specific season (Nov - Mid March)
Larger logs for laying horizontally on the ground	Open ended - depending on what's available and how accessible the grounds are for delivery.	Request advice that the wood type is suitable to avoid excessive degradation or sap (contact a tree surgeon or Arboriculturist).

Loose wooden materials in school grounds need introducing, managing, reviewing and topping up (or recycling) in the same way that existing loose materials such as balls, hoops and skipping ropes do.

When introducing wooden discs, stumps and rods or poles to children involve them in agreeing a simple code of conduct, so that everyone enjoys the resources whilst looking out for each other and themselves. Examples might include no throwing, safe carrying, not putting anything above head height, rolling

heavy logs and carrying poles vertically (keeping one end in contact with the ground) or horizontally (with a child at either end). Agreeing these rules from the outset, and reminding the children in the initial period of access, will ensure safe use both suing class based activities and at play time.





In many schools Pupil Council members have shared their ideas in assembly before asking each class to create a poster for their classroom and a laminated version for outdoors. This helps to ensure consistency of communication and is something playground support staff can refer to when outside.

Encourage children to report breakages and involve the Eco Committee and support staff reps in checking and recycling on a timetable that suits you. Heavy tree stumps will last a long time, but wooden discs will eventually dry out, crack and break.

Long rods and poles are difficult to snap, but splits and sharp sections should be removed or repaired.

Communicate the value of open ended free play and loose materials with your Parent Council and agree that they will ring fence a small proportion of their annual fundraising budget to support replenishment of loose materials as required.

Schools that allow children access to loose and wooden parts during both break times for play and class times for learning outdoors find that the two complement each other and this ensures longer term sustainability. Children gain ideas for play through class based activities and, therefore, their learning





continues outdoors at play time. Similarly, when asked to complete an activity during class time outdoors they are familiar with what materials are available and how they can be used.

Erecting several tall wooden posts into the school grounds is a simple change that offers a wide variety of play and learning opportunities outdoors. Permanently fixing the posts into the ground increases the amount of vertical surface available and means the resource is available for use year round.

### **(iii) Curriculum links**

As with any other loose material, there are a wide range of cross curricular links associated with wood, for example:

#### Languages

Encourage children to find and collect five natural materials that can be hung from a stick using pieces of string and then used as props to tell a story.

#### Science, Technology, Engineering and Maths

The materials can be used to demonstrate understanding of many areas of science, technology, engineering and maths such as angles, shape, symmetry, scale, weight.

#### Expressive Arts

Transient art. Making use of sticks as natural frames. Carving and whittling (incorporating basic tool use with smaller numbers of children). Creation of musical instruments. Use as part of role play.

## Curriculum links for wooden posts

- Tie Hazel / willow rods between posts for jumping over, stretching up to or for limbo dancing. Estimate and then measure heights.
- Tie guttering and pipes between to create ball runs, vehicle runs, water runs. Investigate friction, forces and angles.
- Use of tarpaulins and other materials as a shelter, for den building and tied horizontally between posts as a windbreak to gather behind.
- Create a spider web of rope tied between posts and encourage children to move up, over, under and through - supports physical literacy and problem solving.
- Set up a pulley system between posts to investigate numeracy and forces.
- Create a postman's walk - tie one rope between posts at low level (for feet) and another at a higher level (for hands) and encourage children to traverse from one end to the other to develop physical literacy.
- Weaving through during running activities or run through a winner's line at the end of a race on the grass as part of PE.
- Chalk numbers on posts for maths games. Chalk letters on posts for word games. Write words on posts with chalk linked to acrostic poems, for example.
- Hang stick picture frames between and create a temporary display of natural materials or resources linked to a theme
- Attach rope lines for displaying artwork using pegs, as part of an activity (for example collecting and sorting items) or for temporary resources (for example pots and pans for outdoor music or natural art on calico).
- Hang a bicycle tyre on a rope between poles - something to aim a foam ball at.
- Use tyre inner tubes to create a large scale catapult between posts to fire a beanbag at a target on the ground.
- Use air drying clay and natural materials to create symmetrical and non symmetrical 3D faces on posts.
- Making use of loose materials, challenge the children to move between posts and the surrounding area without touching the ground.
- Decorate posts with coloured chalk linked to a theme.
- Engineering and science - amongst other things this is supported through problem solving, construction and den building.



# RISK BENEFIT ASSESSMENT



## MODULE 5

Draft a risk benefit assessment for access to loose wooden resources – Your RBA will highlight maintenance as part of risk management, for example recycling and replacing broken wooden discs over time and checking for signs of rot and decay. Remember to allocate responsibilities to specific people or groups of people, so that tasks are shared.

Your RBA will have identified issues such as a code of behaviour, rotas, hand washing routines etc. This stage is simply the implementation of these things on the ground, as well as the common sense monitoring and supervising that is already undertaken and making daily decisions about resources based on circumstance.

Examples include temporarily taking resources, such as climbing logs, out of use because of heavy snow and ice or reducing the amount of wooden loose materials available in

the school grounds on a given day because several support staff are off sick.

Larger horizontal logs on the ground: As with any natural resource, a large tree trunk or log will degrade over time – bark will fall off (or be picked off by children) and rot will set in. Softwoods will generally degrade more quickly than hardwoods – but this will still take years. Oak logs will last many, many years.

Consider children's learning and play experiences when deciding whether to modify a horizontal log or tree trunk...some schools choose to include friction strips or grooves in the wood to increase grip, where as other schools place the emphasis on the importance of children gaining experience of the wood in different conditions (for example both wet and dry) and, therefore, learning to modify behaviour – an important life skill.

Experiencing the changing nature of a log over time is one of the many advantages of contact with natural materials. Deadwood is far from dead...providing a habitat for a wide and varied range of species which in turn are a food source for many birds and vertebrates.

## (g) USING LOCAL GREEN SPACES FOR LEARNING

Local green spaces may well offer interest and diversity that is lacking in the school grounds.

Available all year round and without the need for transport, making use of local green spaces offers a wealth of learning outcomes and benefits for children of all ages. Every aspect of use can be linked to learning including: researching the available green space in the area; map reading and using compasses; planning a safe way to travel there; involvement in completing a risk benefit assessment; activities on the journey to and from the space as well as the activities undertaken once there. Making use of local green space for learning also provides the important opportunity for children to develop a sense of place and connect with their local environment, understanding more about the world around them and the

opportunities available in the place where they live.

In part one of this handbook there was a focus on addressing common barriers to taking learning outdoors. The majority of the identified obstacles also have an impact on staff attitudes towards learning outside the school grounds.

The suggestions given in part one to help address these obstacles can also be applied to learning in local greenspace. The importance of establishing routine, having a selection of resources in a rucksack ready to take out and undertaking activities in the same location in different seasons are all important factors in helping to establish routine usage of local green spaces thus enhancing children's connection to them.  
In addition:



- Visit the location in advance to ascertain how far it is from the school, the journey to be taken, the learning potential of the space and any specific resources needed.
- Request parents sign a parental consent form giving permission for using off site, walk to greenspaces for the whole academic year eliminating the onerous requirement for permission slips for every single off-site visit.
- Undertake a risk benefit assessment for the journey and the space to be used. Take this document on each visit and then involve the children in undertaking a verbal dynamic risk assessment at the start of each visit. Record and date any changes or issues, for example an accident, a near miss or practical measures such as leaving a woodland space earlier than expected because of an increase in wind speed.
- Request parental support with the outdoor sessions in local spaces. Their practical involvement will help develop understanding of value as well as providing additional supervision.
- Make the most of the journey to and from the greenspace from an outdoor learning perspective. Engage the children in an activity as they walk, for example collecting or spotting an item that begins with the same letter as their first name, collecting small resources to use as props for storytelling in the greenspace, undertaking a survey or spotting signs of the season.
- Younger children may benefit from walking using a prop, for example a length of rope that each child holds whilst walking in a line.
- As well as the behaviour management suggestions in part one including defining the boundary of the learning space outdoors and agreeing a signal to attract attention, agree the same central meeting area in the space every time the space is used. Leave the kit bag and seat pads in this area and identify other visible signs, such as a large tree or tie a tarpaulin up to create simple cover. This central space can be used to gather everyone and also as a visual sign to support children's understanding of boundaries. When moving around the greenspace children must ensure that the tree or tarpaulin must remain visible to them at all times.
- Agree toileting rules with the children. In summary an area for toileting away from the main space being used should be agreed. A screen can be erected to maintain privacy such as a tarpaulin strapped between two trees. There should be access to warm running water for handwashing is also essential. A container of water can serve this purpose but it is useful to have a packet of hand wipes available as well. All used papers and hand wipes should be bagged and binned back at school.
- Access to running water for handwashing is also essential if the outdoor learning session incorporates time for a mid morning snack or a packed lunch.

See Public Health Scotland and Public Health England websites for more information

## **Finding and accessing a local greenspace:**

Consider what is on your doorstep. Most schools have access to a local park or greenspace. To find out more about what opportunities are within walking distance of school, use a local map, talk to colleagues, and talk to parents. Take the children on a walk around their local area and undertake learning tasks on route. If there is no public park or open green space, request permission from the landowner of the nearest space identified. Consider churchyards too as these are often great places for wildlife and to explore nature.

Some teaching staff worry about their lack of knowledge with regards to supporting children to engage with nature outdoors. Remember it is not about teachers knowing everything and identifying every living thing but it's more about increasing competency and understanding about the opportunities and then engaging and enthusing children. Research has shown that "An adult's attitude to the environment and time spent outdoors in green space is strongly influenced by their experience as a child" (Bird, 2007.)

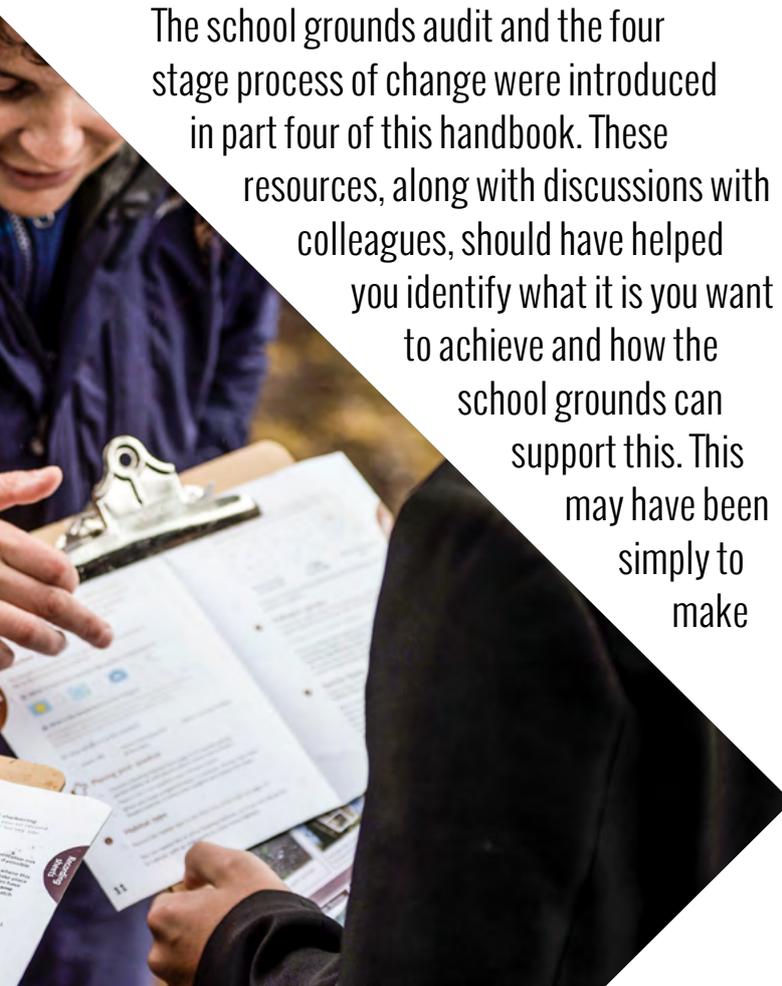


# 7) MAINTAINING MOMENTUM AND ENSURING LONG TERM SUSTAINABILITY

This section focuses on reflecting on the progress made so far, ideas to help further embed outdoor learning into the life of the school, encouraging others to get involved, celebrating success and building on current practice to ensure long term sustainability for both the children at school now and those who attend in the future.

One of the keys to success included in this handbook is an approach that is **holistic**, **participative** and **sustainable** - focussing on the learning potential of the whole school grounds, involving representatives from across the school community and making sure any small changes to the grounds and / or to teaching practice are maintained, and enhanced, long term.

## EVIDENCING IMPACT AND MEASURING SUCCESS



The school grounds audit and the four stage process of change were introduced in part four of this handbook. These resources, along with discussions with colleagues, should have helped you identify what it is you want to achieve and how the school grounds can support this. This may have been simply to make

better use of the grounds for learning outdoors across the curriculum and to overcome some of the obstacles you faced in making more use of the spaces available. This may have led on to thinking about, and implementing, small changes in the grounds to help support learning outdoors for children of all ages, encouraging other colleagues to make use of the grounds with the class they teach and promoting the benefits and value of outdoor learning to parents.

Refer back to process of change cycle and the results of your audit - have you achieved what you set out to achieve and how can you evidence this:

- Have the number of lessons taught outdoors increased since this process began?
- Has the awareness of the value and benefits of outdoor learning increased amongst the school community (include teaching staff colleagues and parents)? How has this been achieved, for example a regular agenda item at staff meetings, information dissemination to parents, a related school display, more lessons taught outdoors?
- What has been the impact on children's learning and on their health and wellbeing? Professional observation, pupil voice / pupil feedback, work completed outdoors by children outdoors and photo evidence will all help answer this question.

## LEARNING OUTDOORS - LONG TERM SUSTAINABILITY

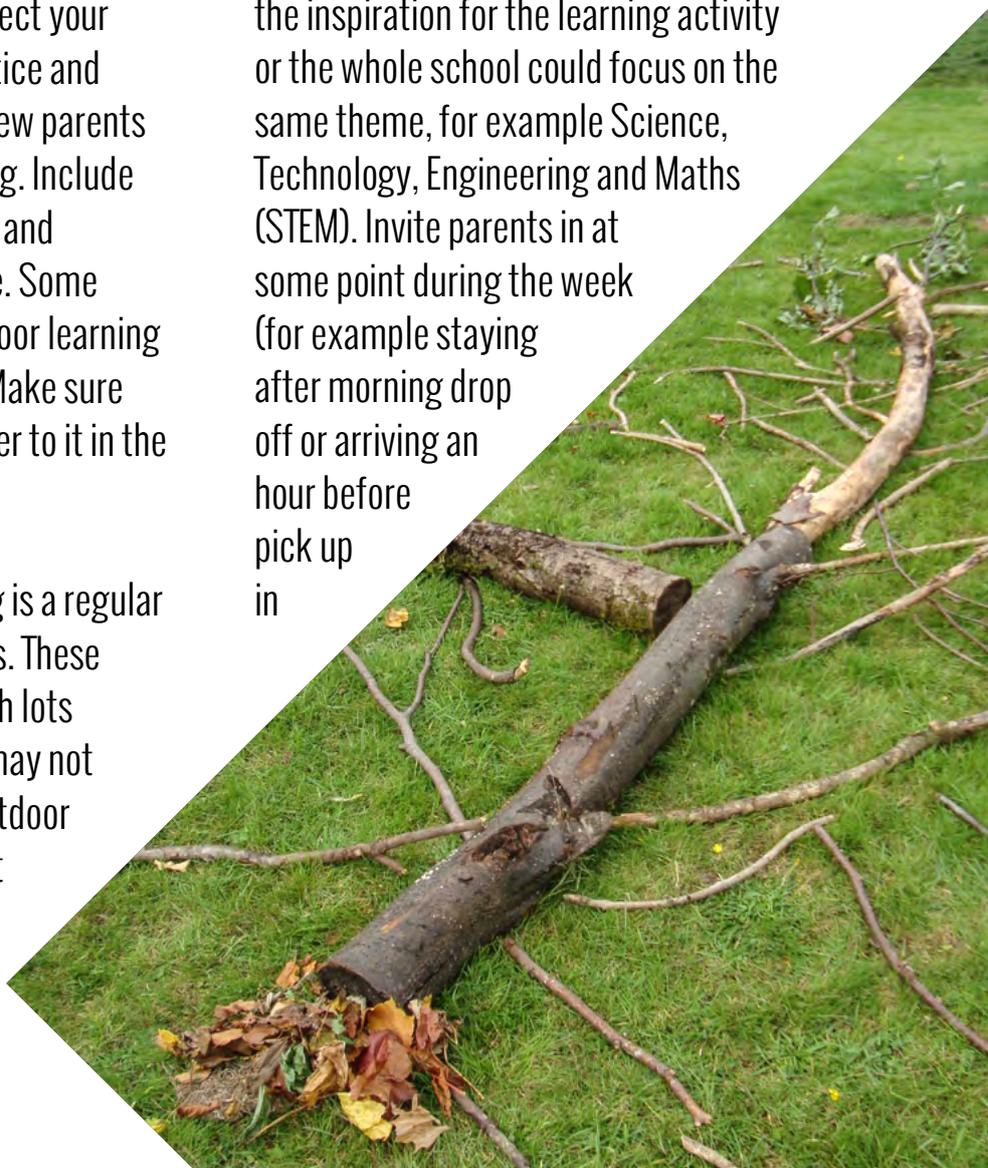
Now you have:

- Looked at...
- Identified and addressed
- Made the most
- Begun to build

Now consider some of the following suggestions for maintaining momentum.



- Reference taking learning outdoors as a priority in the school improvement plan and agree how this will be achieved (for example the expectation that outdoor learning opportunities will be included in topic planning by all staff).
- Record and store ideas and activities that have worked outdoors, lesson plans and photos for other colleagues to learn, use and benefit from. Identify the best place to store these on the school computer system, for example in a staff shared file and labelled by subject.
- As a staff team develop a whole school outdoor learning policy to reflect your agreed vision, ethos and practice and disseminate to existing and new parents to help promote understanding. Include images and quotes from staff and children to bring the text alive. Some local authorities have an outdoor learning or outdoor education policy. Make sure staff are aware of this and refer to it in the school's own policy.
- Request that outdoor learning is a regular agenda item at staff meetings. These meetings are always busy with lots of items to discuss, so there may not always be time to focus on outdoor learning at every meeting, but keeping the item on the agenda maintains the focus and provides a regular opportunity to share practice, discuss issues and identify staff needs (for example training).
- Agree and set targets for outdoor learning with staff, for example one outdoor lesson a week, once a fortnight, increasing learning outdoors across the stages over the course of the academic year around a priority theme for the school (for example literacy or numeracy).
- Organise and advertise an outdoor learning week where all classes are out at some point over the five days. Teaching staff could use their current topics as the inspiration for the learning activity or the whole school could focus on the same theme, for example Science, Technology, Engineering and Maths (STEM). Invite parents in at some point during the week (for example staying after morning drop off or arriving an hour before pick up in





the afternoon) to observe the children in action and help support their understanding of the benefits and value associated with learning outdoors.

- Another option which many schools have used to promote the value of outdoor learning and ensure that under confident staff feel part of a team learning together (rather than worrying about individually meeting targets) is to organise a regular outdoor learning day which begins with a whole school assembly (including parents) and then activities are undertaken in the grounds which parents are encouraged to observe and enjoy. Verbal feedback from both pupils and parents is gathered and shared after the event, along with photographs of activities.
  - Include outdoor learning activities as part of an existing initiative in school, for example most schools run an annual health week, an Eco week or a science and engineering week during the academic year.
  - Encourage under confident staff teaching the same year group, to buddy up and take a lesson or activity outdoors together to increase confidence and learn from each other.
  - Identify relevant, meaningful Continuous Professional Development (CPD) training and support regarding learning outdoors for teaching staff.
  - Make contact with schools that have already embedded outdoor learning to learn from them.
  - Develop a list of useful contacts who can help support the school community with learning outdoors, for example Education Officers within the local authority, local Rangers, and Education / Project Officers within relevant organisations (for example Learning through Landscapes [www.ltl.org.uk](http://www.ltl.org.uk), the Wildlife Trusts [www.wildlifetrusts.org](http://www.wildlifetrusts.org), John Muir Trust [www.johnmuirtrust.org](http://www.johnmuirtrust.org) and Council for Learning Outside the Classroom [www.lotc.org.uk](http://www.lotc.org.uk)
  - In Scotland find out who is the local contact within the Scottish Advisory Panel for Outdoor Education (SAPOE) [www.sapoe.org.uk](http://www.sapoe.org.uk) and in England the local contact within the Outdoor Education Advisors Panel [www.oeap.info](http://www.oeap.info)
- 

- Audit the parent body by requesting a response to a simple questionnaire focussing on any skills they can offer school and any relevant contacts they have. Request parent volunteer support, for example as an extra pair of hands when taking learning outdoors during class time and / or supervisory support over break and lunch time.
- As part of the annual fundraising undertaken in school, advertise the fact that the money raised from one or more of the events will be specifically spent on outdoor learning resources and kit. This could include relevant equipment and outdoor clothing.
- Request the Parent Council ring fence a small proportion of their annual fundraising target to replenish outdoor resources as required.
- Develop a bank of spare outdoor clothing and wellingtons for use by those children that don't come to school appropriately dressed when required.
- Reduce paperwork, and raise awareness and understanding, by distributing an annual consent form to parents at the start of the academic year requesting permission for their child to undertake all routine and expected, non adventurous local trips throughout the school year.
- Keep the focus on outdoor learning by communicating activities and practice in a wide variety of ways, ensuring the message is sustained.



## Examples include:

- Displaying work undertaken outdoors linked to a topic for all to see, including parents waiting at pick up time. Classroom walls and school corridors are always decorated with children's topic work. This is often not the case outdoors, despite the fact that boundary fences, walls and gates provide vertical surfaces for display purposes and the chance for children to share what they have achieved with their parents.
  - Include regular articles regarding outdoor learning in the school newsletter.
  - Develop a specific section on the school website linked to outdoor learning and include images of activities and feedback from staff and children. Involve children in contributing to, or writing, an online blog on the website highlighting the activities around their topic each term
- Invite parents in to hear an assembly that includes a section on outdoor learning activities or a presentation from a group of children.
- Involve a group of children, for example the Eco Committee or Pupil Council, in developing and maintaining a permanent outdoor learning display board in school. Ensure the chosen location is prominent and easily accessible by all, for example around the entrance area inside the school building. Encourage staff to provide images and feedback about their activities for the display at staff meetings.
- Include an acknowledgement of the important role outdoor learning plays in the life of the school as part of the school handbook and the information given out to new parents.
- Ask a class of children to write home to their parents inviting them to come into school an hour before pick up time to observe the class outdoors undertaking a learning activity.
- Expand your outdoor learning provision by moving beyond the boundary of the school grounds to incorporate lessons in walk to spaces within the local environment.
- Include outdoor learning as part of homework activities - another great way of spreading the message to parents, but also a chance for children and parents to undertake activities outdoors together. Learning through



Landscapes has produced a free outdoor homework module over the course of the academic year. The associated curriculum references relate to the Scottish Curriculum for Excellence, but

the activities are not Scottish specific and can be used anywhere. All the details can be found here : <https://www.ltl.org.uk/resources/results.php?id=859>

## MAINTAINING GROUNDS CHANGES - LONG TERM SUSTAINABILITY

*“Involving students in development and maintenance increases ownership.”*  
Deputy Headteacher quotation

Part four of this handbook highlighted the importance of considering the management and long term sustainability of your grounds when planning any changes or improvements. The two principles go hand in hand: managing your grounds in a sustainable way is good for the environment and will enable any changes to endure over a number of years.

Sustainability often refers to

making sure the environment is well cared for and able to support all forms of life - and this means humans too! Your school grounds are an ideal place to establish environmental principles to support both the environment and to educate the children who play and learn in the space. It is not uncommon for schools to teach about the importance of caring for the environment within lessons, but being outdoors can demonstrate how these principles work in practice - a powerful way to communicate your message.

Sustainability also refers to making sure that any new policies or practices are established, reviewed and, if necessary, renewed in such a way that they will endure for the long term.



Maintaining the school grounds, and any changes made, is an important part of ensuring long term sustainability and promoting the message that the grounds are just as important a learning environment as the indoor classroom.

Involving children in maintenance planning and implementation helps share the responsibility and embed activities into school life both now and in the future. Involving children, as well as adults, in simple maintenance tasks also has the advantage of promoting responsibility, a sense of pride and a connection with the space where children spend time during the school day.

Although maintenance is important long term, it is well recognised that schools are busy places and the time both children and adults have during the school day is limited. With this in mind, the emphasis throughout this handbook has been on making the most of what is accessible (both within the school grounds and in walk to green spaces) and keeping in mind that any changes made to the school grounds should, ideally, be as low maintenance as possible.

In some cases limited maintenance is actually an advantage and should be encouraged to provide an enhanced opportunity for outdoor learning, for example there's a difference between regular maintenance in a gardening space for growing fruit and vegetables versus limited

maintenance in a green area to allow recolonisation of the space and, therefore, the creation of a naturally wild area that can be used for studying, and connecting, with the natural world through the seasons.

When limited maintenance to create such features is undertaken, some schools have found it important to communicate this to the wider community (including parents). Through the creation of signage designed by pupils, it is possible to undertake a positive PR campaign promoting the fact that the area in question may look 'messy', but the purpose behind this is to support children's understanding of the natural world, study lifecycles, seasonal changes in nature and promote a space for wildlife. It is also important to identify these areas to the relevant grounds maintenance team within the local authority in order to agree a reduction in mowing or to remove this area from the authority maintenance plan altogether.

Where maintenance of the space is required long term it should be considered right from the start, making it much easier to incorporate over time.





In order to ensure the outdoor space is cared for appropriately and doesn't end up unused and unloved, consider the financial implications as well as how the space will be looked after.

- How much will it cost to undertake the work?
- Are these ongoing costs or just a one off payment?
- Can the work be undertaken by volunteers and the school community or does it need specialist (usually paid for) help?
- What equipment or materials are needed to undertake maintenance long term (for example gardening tools)?

Maintenance of the outdoor area may involve a variety of groups and individuals depending on what is required and the budget available.

For example:

- A landscape contractor
- A gardener
- School staff
- Parents and volunteers
- Pupils

Community based organisations, for example a local allotment group, community service volunteers and charities such as The Conservation Volunteers [www.tcv.org.uk](http://www.tcv.org.uk)

Once you have identified what needs maintaining, put together a check list that identifies the tasks involved, when and by whom. Developing a maintenance plan covering the twelve months of the year into a colourful poster for each classroom, and the staff room wall, helps keep the tasks in mind and ensure they are completed.



*“Trust in your students. No matter what year group the children are amazing at taking ownership and learning what needs to be done to maintain and sustain areas around our school. This could be weeding and filling ponds, weeding vegetable plots or picking up litter, the pride and responsibility that comes with the ownership is incredible.”*

Deputy Headteacher quotation

# MAINTENANCE AND SUSTAINABILITY OF LOOSE MATERIALS IN THE SCHOOL GROUNDS

Planning, introducing and sustaining access to loose parts in the school grounds for outdoor learning and play was covered in part six of this handbook.

Although relatively maintenance light, as with any change or improvement to the school grounds, a plan of action with regards to long term maintenance and use is required.

It is important that the maintenance of loose parts, including access and maintaining the amount and variety of materials, is not the responsibility of just one person. Schools that have achieved long term sustainability of loose parts view access to these resources as beneficial to both outdoor play and learning and, therefore, take a whole school approach to maintaining access involving both staff and children.

Set up a group to help manage, recycle, replenish and replace materials as required (involve support staff, teaching staff and pupil

representatives. This could be an established group in school, for example the Eco Committee or Pupil Council, or a new group.

If setting up a new group, capitalise on the links to literacy by encouraging children to apply for a position detailing their interest, what they can offer and why they think they should be chosen. Set a time limit for members to be involved with the group and then create an opportunity for current group members to pass on their knowledge and expertise to new group members to ensure continuity.

Diarise annual / bi annual (or more frequent) play afternoons / play days where parents are invited in to school to play and learn with their children outdoors.

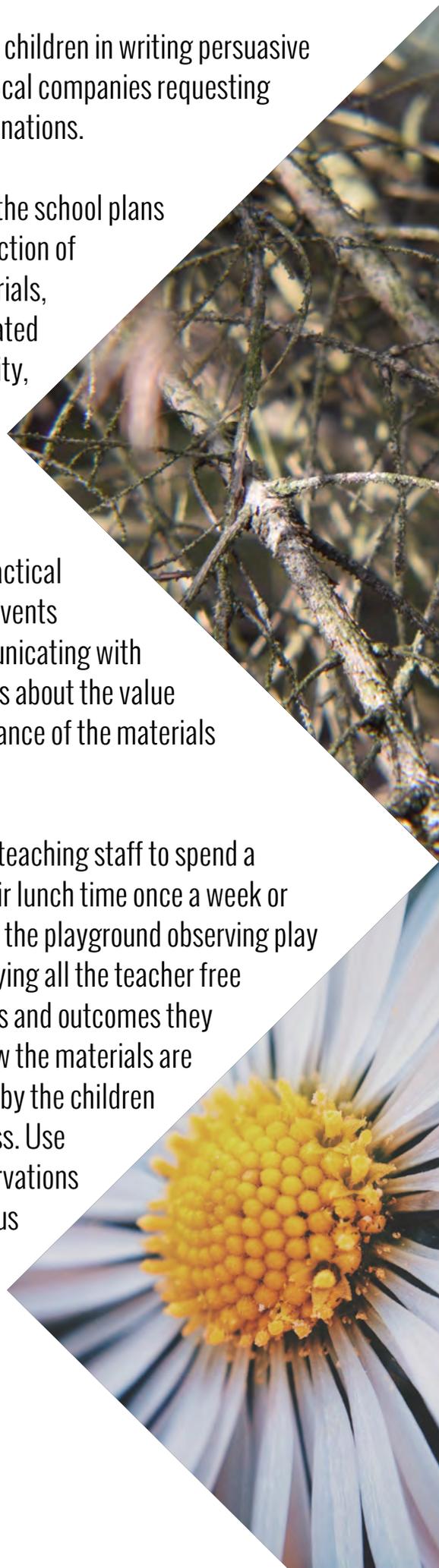
Include the ongoing use and development of the grounds in the school improvement plan and encourage the use of loose materials in individual lesson planning.

Organise events or activities with a specific theme to help support play and learning, highlight the value of loose materials and keep access fresh and interesting, for example organise a cardboard event or provide access to several straw bales in the summer

Add one or two (or more!) loose resources per term by consulting with the children and responding to observations from support staff and teaching staff about what materials are missing or what needs replenishing Don't forget small world figures, vehicles and animals as well as the bigger stuff.

- Organise material donation days twice a year to maintain stock levels.....'we're looking for, please deliver by'.
- Link with the Parent Council to request a small amount of funding is ring fenced each year for replenishments / replacement / maintenance.
- Agree with the school office staff that all cardboard packaging left behind after deliveries will be available for use as a loose material before being recycled when no longer useable (for example after rain).
- Place seasonal requests with the local Ranger Service or a local tree surgeon. Request resources such as wooden branches, stick, leaves, stumps and bark chippings.

- Engage the children in writing persuasive letters to local companies requesting material donations.
- Make sure the school plans the introduction of loose materials, and associated responsibility, to the new pupil intake each year through practical transition events and communicating with new parents about the value and importance of the materials outdoors.
- Encourage teaching staff to spend a little of their lunch time once a week or fortnight in the playground observing play and identifying all the teacher free experiences and outcomes they see and how the materials are being used by the children in their class. Use these observations as a stimulus for further learning during class time.



- Encourage staff to make use of the loose materials during class time outdoors. Set up a file on staff share to record and save activity ideas, images and curriculum links.

The following document provides an easy to read summary of planning, sourcing, introducing and sustaining access to loose materials in school grounds, including curriculum links and activity ideas. Useful as easily accessible reference material and free to download <https://www.inspiringscotland.org.uk/hub/loose-parts-play/>

## MAINTENANCE AND SUSTAINABILITY OF SOIL AND MUD IN THE SCHOOL GROUNDS

### Top tips:

- Purchase bags of top soil, rather than compost, and top up as required.
- Include the children in creating a related risk benefit assessment for mud play
- An outside tap will provide a source of water to support mud play, but access to free flowing water will also help support washing equipment every so often and provide the chance to rinse hands before heading back inside (avoids the indoor sinks becoming dirty). The water supply does not have to be located in the same place as the mud kitchen. Children can use resources to transport water as and when they need it.
- Consider providing access to a bowl of warm soapy water at the end of play to help establish the hand washing routine.
- Consider a variety of materials to help support children's imagination and creativity and establish links to curricular areas such as literacy, numeracy and science. Changing materials, or adding new items, will also help keep play fresh. Example materials include small world figures, bowls, spoons, jugs, natural resources, materials to support weighing and measuring, funnels and brushes.



# MAINTENANCE AND SUSTAINABILITY OF SAND IN SCHOOL GROUNDS

Sand play can present a number of management issues for schools.

## **Sand blow**

Avoid siting an area of sand in the windiest part of the grounds. A covering net or tarpaulin will reduce or eliminate sand blow. If you do choose to use a cover, source one with small holes to allow air to circulate and rain water to percolate. Accepting a degree of sand blow and topping up with fresh sand when required should form part of your maintenance plan. Where the site allows it, planting quick growing shrubs and / or evergreen planting around the sand area will help create a wind break. Hosing down the sand in very dry periods will also minimise blow.

## **Sand indoors**

Sand will travel indoors - in shoes, pockets and sleeves, creating extra work for cleaning staff. The solution is for children to be taught a sand routine of shaking their clothes out before they leave the sand area or whilst they are lining up to go inside. Provide a soft brush for dusting down shoes and clothes, a doormat for feet wiping or changing to indoor shoes will also help. Children should be taught simple hand hygiene after learning outdoors in sand.

## **Cat or fox faeces and other litter**

There are a number of approaches to managing this problem:

Monitoring is important as the situation will change over time as local cat and fox populations change. Cats are most likely to use a sand pit at night, so inspect in the mornings and adapt your inspection frequency to match the occurrence this may be daily, weekly or monthly. Rake the sand during an inspection as cats will often bury their faeces. Discourage cats from visiting the site. Deterrents include high frequency devices that are triggered by animal movement, plants that deter cats, half filled bottles of water and using scents that cats dislike.

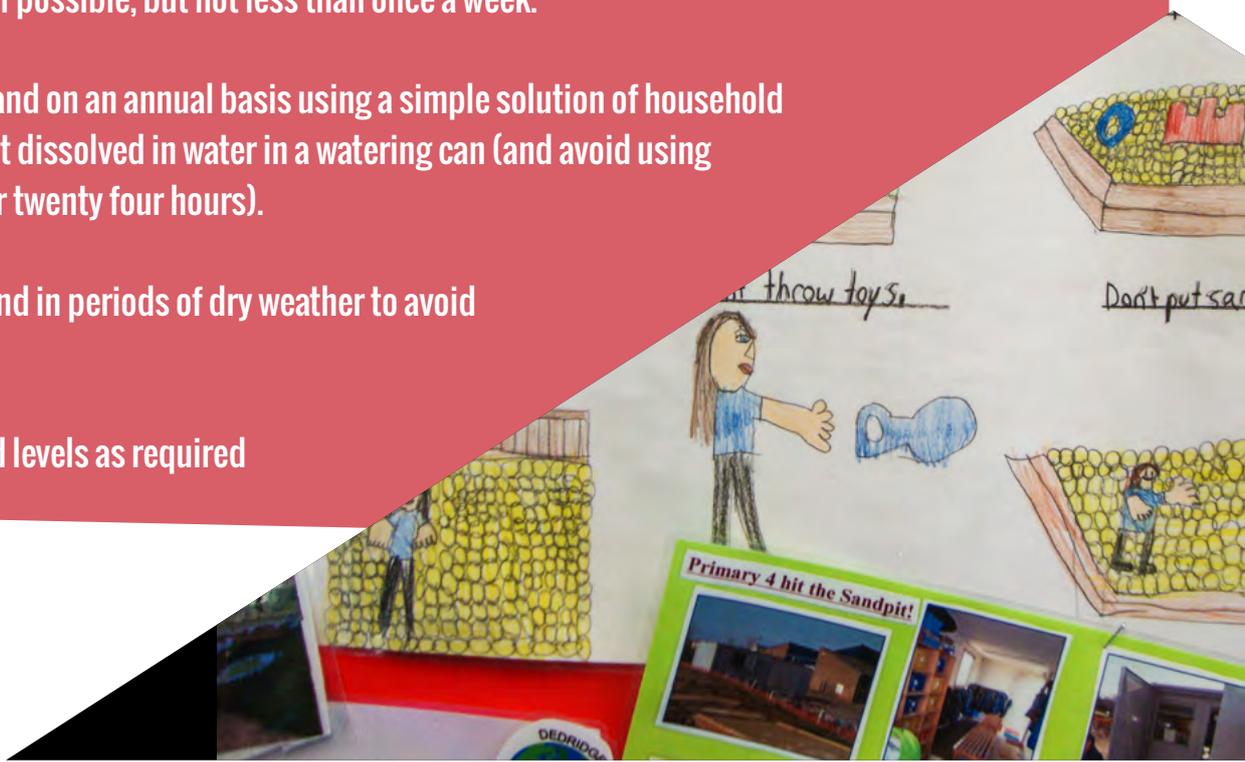
Covering sand is a common strategy, but this is more problematic in a large, or irregular shaped, sand area. Many schools buy a cover and then find, through regular maintenance, that the cover is not used.

Involve staff and children in creating a risk benefit assessment for using the sand and agree a code of conduct to promote responsibility, for example no eating or drinking in the sand and no throwing. Advice and support regarding sand maintenance is available through the RoSPA website here: <https://www.rospace.com/play-safety/advice/sand-play/>

# IN SUMMARY

## Sand Maintenance Top Tips

- Undertake a visual inspection everyday in advance of use.
- Rake daily if possible, but not less than once a week.
- Disinfect sand on an annual basis using a simple solution of household disinfectant dissolved in water in a watering can (and avoid using the sand for twenty four hours).
- Dampen sand in periods of dry weather to avoid sand blow.
- Top up sand levels as required



## MAINTENANCE AND SUSTAINABILITY OF PONDS IN THE SCHOOL GROUNDS

Undertake a risk benefit assessment and consider the construction of the pond, the planned activities and unregulated access (including break times and when the school is closed). The findings from your assessment and the resulting control measures must be relayed to all school staff and others involved with pond activities. Adequate instruction must be given to pupils about the risks and how they are expected to behave whilst using the pond area. The type of access required

should also be determined as a result of your risk assessment. The simplest and most obvious way to restrict unsupervised access is to put a fence up around the perimeter. If the pond is located near to school buildings where it is clearly visible, a pond grid may be all that is required. This is a simple metal grill below the water line.

Many schools opt successfully for a more open plan approach and choose a barrier free

approach. Instead they make a serious and invested effort to educate their pupils on the use of the pond area and the importance of safety. Education raises awareness of the hazards and reduces the risks because the pond is respected and understood.

There are of course certain measures that can be put in place to reduce the risk of accidents. If the pond is in a clear line of site potential accidents can be seen and heard. It is much safer for children and preferable for wildlife if the pond's edges are kept shallow, with one deeper zone positioned centrally or even towards an inaccessible side of the pond. Suitable provision should be made at the water's edge for groups to work safely. This is best provided by hard, flat, standing areas at accessible parts of the pond. Soft edges for wildlife access must be inaccessible to people. This can be achieved with the planting of large shrubs that are difficult to get through.

Appropriate signs can also be put in place, warning of the presence of the pond, detailing safety advice and offering

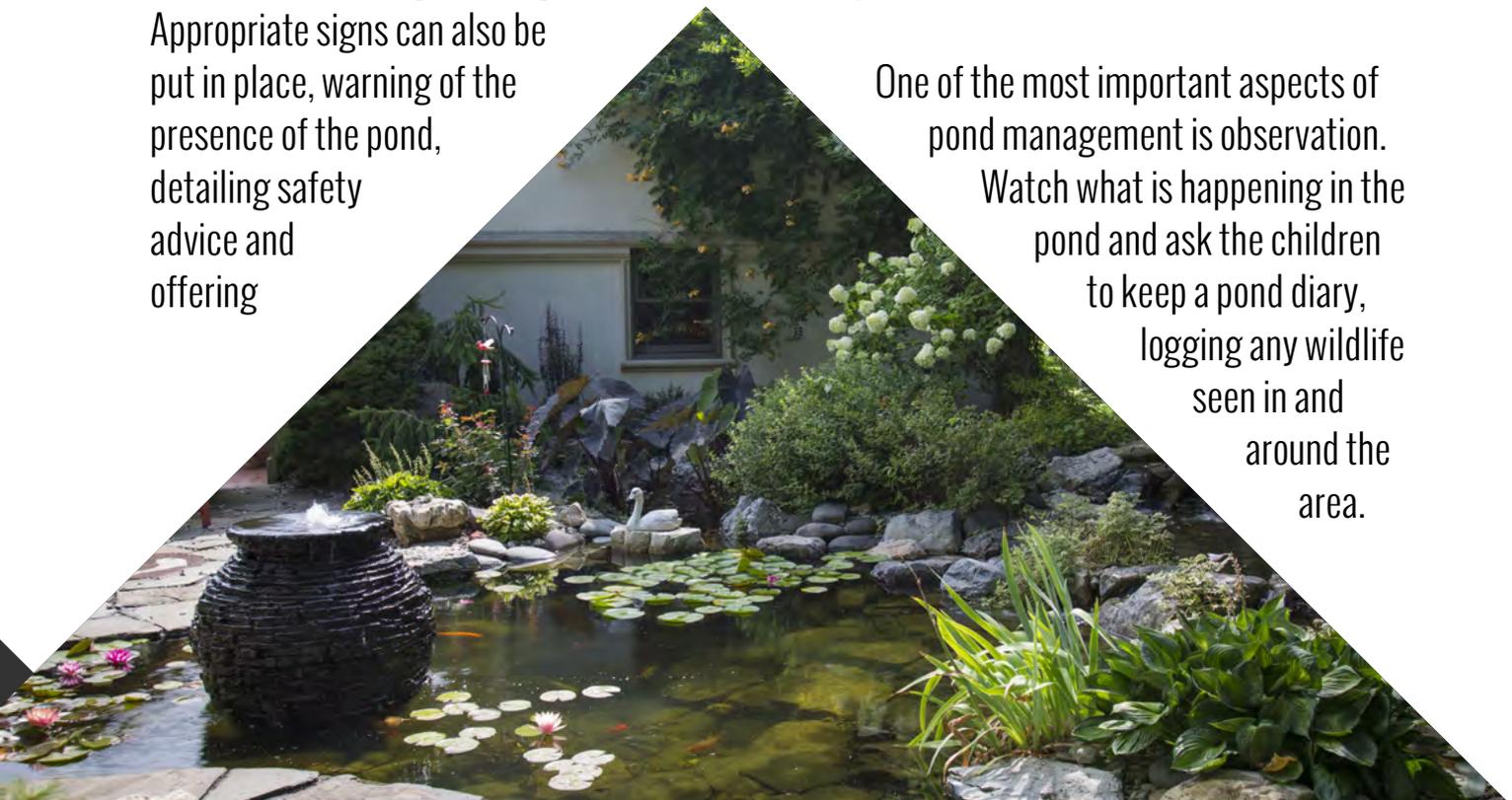
guidance on the use of the area. This is something that pupils can get involved in by coming up with a list of rules and designing the signs.

A larger, permanent pond does require ongoing maintenance. The spread of invasive plant life and the build up of silt will slowly start to lead to the disappearance of open water and eventually leave you with a neglected, overgrown and unusable school pond.

Remember, this is a natural habitat, so too much interference may harm the local biodiversity. Winter is a dormant period for ponds and therefore the best time to remove silt and clear overgrowth without disturbing too much wildlife. Any organic matter removed should be left at the side of the pond for a few days to enable any displaced wildlife to crawl back into the water before the plants are taken away.

One of the most important aspects of pond management is observation.

Watch what is happening in the pond and ask the children to keep a pond diary, logging any wildlife seen in and around the area.





Note down what produces flowers and when. Log how the water levels rise and fall throughout the seasons. This record of how the pond is changing will help decide whether maintenance is needed, what kind and when.

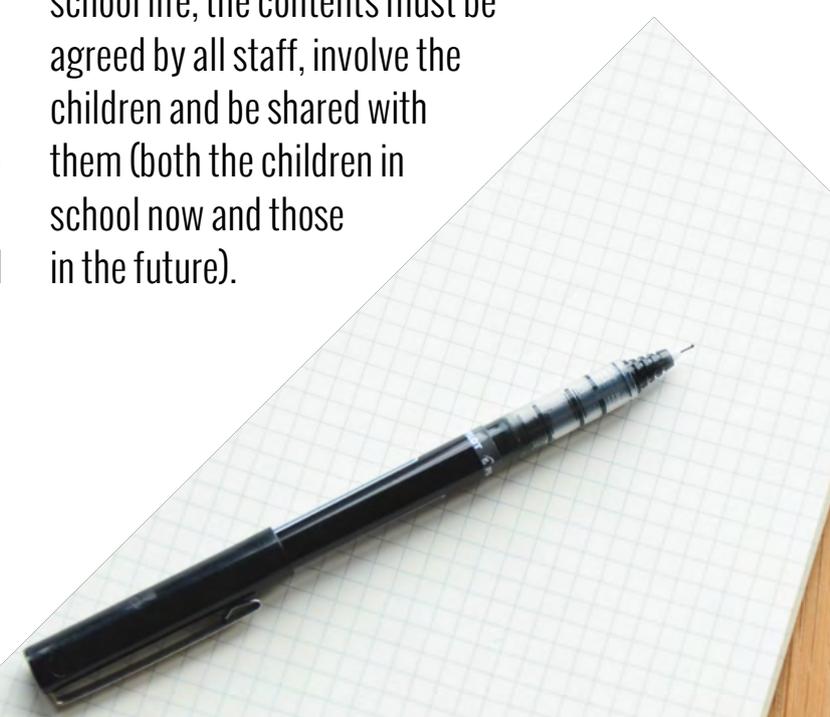
Vegetation that is becoming too abundant will need removing. When one or two plant species are starting to become dominant then, in most cases, the pulling out of small amounts of vegetation will be more effective than drastic plant clearance. In winter submerged plants can be thinned out by gently raking them. Winter is also a good

time to trim back any dead or dying plants before they fall into the pond. Removed plants should be left by the side of the pond to allow wildlife that may be caught up to escape back into the water. Trees and shrubs around the pond may need cutting back to allow in much needed sunlight. Pond liners rarely need maintenance unless holes or cracks appear. Holes in flexible liners can be repaired using a waterproof liquid sealant and tape. The water level may drop, particularly in warmer weather, so this may need topping up over time.

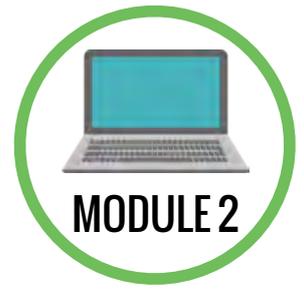
## REVIEWING RISK BENEFIT ASSESSMENTS

Any risk benefit assessment linked to learning outdoors should be seen as an active document that is reviewed annually (or more frequently if changes are made to the grounds in the interim period). If further changes are made to the grounds then these changes need to be incorporated into the assessment at the time. Make it part of good practice to review the assessment regularly to make sure the systems in place are working effectively.

In order to ensure that risk benefit assessments become embedded into school life, the contents must be agreed by all staff, involve the children and be shared with them (both the children in school now and those in the future).



# DEVELOPING A POSITIVE ATTITUDE TO THE OUTDOORS



Throughout the journey through school, children encounter a range of teaching and support staff when moving up through the stages and when an adult leaves school and is replaced by another member of staff. Successful and positive child attitudes are dependant on engaged adults. For some staff it is just a case of making a few simple changes and trialing activities to develop confidence, for others it takes longer. As a school, the long term sustainability of taking learning outdoors is highly dependant on staff attitude, ability and confidence.

In addition to the ideas suggested earlier in this section about maintaining momentum long term, factors in developing a positive attitude amongst staff towards making use of the outdoors for learning include:

- Provision of suitable clothing for adults to use when outdoors with classes.
- Be clear regarding expectations around outdoor learning when recruiting new staff.
- Lead by example. The staff that go outdoors regularly can become role models for the kind of interaction expected from others.
- Identify the issues that concern staff and organise appropriate in service training.
- Compromise and use a gradual approach to better understanding
- Whatever the attitudes of staff, change takes time and effort. Lots of small changes over time and working together as a team, supporting each other and recognising success, often leads to bigger change.
- Review your outdoor learning and play policy and ensure it meets your needs, and that the whole staff team are aware of, and have agreed to, the contents as a true reflection of your ethos and aims as a school with regards to outdoor learning experiences for children of all ages.





# CONTENTS

1) REVIEWING CURRENT OPPORTUNITIES AVAILABLE IN THE SCHOOL GROUNDS NOW .....	1
2) OVERCOMING OBSTACLES TO TAKING LEARNING OUTDOORS .....	8
3) USING EXISTING GROUNDS FEATURES TO TEACH THE CURRICULUM .....	21
4) SUPPORT WITH PLANNING SIMPLE CHANGES TO THE GROUNDS .....	36
5) EXAMPLES OF SIMPLE PHYSICAL CHANGES TO YOUR EXISTING SPACE .....	49
6) EXAMPLES OF MORE COMPLEX GROUNDS CHANGES TO SUPPORT OUTDOOR LEARNING .....	60
7) MAINTAINING MOMENTUM AND ENSURING LONG TERM SUSTAINABILITY .....	83





# REFERENCES

Malone, K. (2008) Every Experience Matters: An evidence based research report on the role of learning outside the classroom for children's whole development from birth to eighteen years, Report commissioned by Farming and Countryside Education for UK Department Children, School and Families, Wollongong, Australia.

Alvarez-Bueno et al. (2017) Academic Achievement Physical Activity: A Meta-analysis

Both direct and vicarious experiences of nature affect children's willingness to conserve biodiversity (Soga et al., 2016)

Kuo, F.E., & Faber Taylor, A. 2004. A potential natural treatment for attention-deficit/hyperactivity disorder: evidence from anational study. *American journal of public health, 94(9), 1580 -1586.*

Young Children's Relationship with Nature: Its importance to Children's Development and the Earth's Future  
Randy White, (2004) White Hutchison Leisure and Learning Group

Curriculum:

Scotland

"Outdoors is often a more effective place to learn than indoors" Scottish Curriculum Guidelines

Outdoor learning is identified within the GTCS professional standards as an aspect of good teaching practice.

England

Outdoor education is considered as making a positive contribution to students' physical, personal and social development and is a valuable aspect of learning outside the classroom reaching beyond the formal curriculum.





## References Part 3

Outdoor Journeys <http://35.177.89.180/>

Restorative properties of trees: [https://www.researchgate.net/publication/284477795\\_Environmental\\_preference\\_and\\_restoration](https://www.researchgate.net/publication/284477795_Environmental_preference_and_restoration)

Sustainable Development goals: <https://sustainabledevelopment.un.org/sdgs>

Citizen Science in the UK: <https://www.opalexplorenature.org/>

The Daily Mile initiative: <https://thedailymile.co.uk/>

## References / Resources Part 5

Willow planting guidance: <https://www.ltl.org.uk/pdf/Living-Willow-Structures1403855117.pdf>

The Woodland Trust tree planting guidance: <https://www.woodlandtrust.org.uk/plant-trees/free-trees/>  
<https://www.woodlandtrust.org.uk/plant-trees/advice/how/>

Meadow creation guidance: <http://www.polli-nation.co.uk/activity/our-school-grounds-providing-food-meadows/>

Orchard creation guidance: [https://www.theorchardproject.org.uk/guides\\_and\\_advice/planting-your-orchard/](https://www.theorchardproject.org.uk/guides_and_advice/planting-your-orchard/)

Pond and wetland creation: <http://www.froglife.org/info-advice/just-add-water/>



*CHANGE THE GROUNDS - Transforming spaces for learning activities*  
Authors: Clare Rooney, Stephen Moizer and team

*The project is co-funded by the Erasmus+ programme of the European Union*  
*Project number: 2017-1-SK01-KA201-035316*

*image credits: Malcolm Cochrane (63, 76 top and bottom, 77, 83, 88, 99), Felicity Robinson (19, 20), pixabay (1, 2, 5 left, 7, 11, 14, 30 top, 31, 32, 39, 43, 48 all, 53, 55, 78, 79, 86, 87, 92, 93 bottom), pixino (16, 98), wikimedia (17, 94), max pixel (60 left, 97), freepik.com (35, 46), pexels (13, 93 top), publicdomainpictures.net (42), flickr (45), pxhere (47)*

*This cover has been designed using resources from Freepik.com*

*The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*



**Erasmus+**