

YOUR SCHOOL GROUNDS HANDBOOK

WHY DO ANYTHING WITH YOUR SCHOOL GROUNDS?

Your school grounds are an important asset but are you sure you're getting the maximum return from them? Some schools ignore the potential of their grounds or believe that they are best left alone as long as they are neat and tidy.

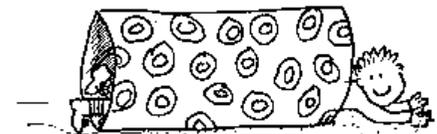


But investing a little time, money and imagination could transform your school and have a really positive influence on your pupils.

Unfortunately many schools are set in grounds which are uninviting, featureless and exposed to the elements. Playground supervisors often see the effects of this on pupils at break times: aggressive behaviour, bullying, vandalism, accidental injuries caused by playground collisions and just plain boredom. Teachers will see it when their pupils take the problems of the playground back into the classroom after break.

Research by **Learning through Landscapes** suggests that an uninteresting environment which is evidently not valued by the school will not be valued by its pupils and a bleak environment may convey the message that the pupils are not valued members of our society.

School grounds **can** be designed to facilitate learning and provide a rich variety of spaces offering different qualities and experiences. Pupils should have the opportunity to join in various forms of active and passive play or just sit in shelter from rain, sun or the prevailing wind to talk.



To get the most out of your grounds you will need to involve the whole school community in the re-planning process. You will need to raise money to pay for the improvements and you will need some willing workers to help implement the various stages of the plan as and when sufficient funds are raised.

This handbook will provide an introduction to the process of re-planning your school grounds, it will give you some ideas for creating good educational landscapes and provide you with a step by step guide to achieve your goals.

THE POTENTIAL OF SCHOOL GROUNDS

Don't forget that you are going to be creating an environment which balances the need for learning opportunities with the creation of good play and social facilities. It will also be your contribution to the local environment.

It is important then to bear in mind that school grounds can be used to support both the **formal** (teaching), **informal** (social and play) and the **hidden curriculum**:

Formal curriculum

In many schools the largest single use of the school grounds is for sports and games. No-one is suggesting that this should change but there will be other areas which could provide opportunities for the formal teaching of other elements of the curriculum.

Informal curriculum

Schools which have provided a range of different play facilities and places for social interaction have noted that, with more positive ways of channelling pupils' energy and aggression, anti-social behaviour is lessened and there are fewer accidents.

Hidden curriculum

Schools which have involved their pupils in the improvement process have noticed a decrease in vandalism resulting from the increased sense of pride and identification with the school which this engenders.

HELP IS AT HAND!

If all this seems a very remote possibility for your school don't despair! This handbook will guide you and in the appendices at the end you will find the names of some publications and organisations which will provide advice, practical assistance and, sometimes, even money to help you.



HOW DO WE START?



The best way to start changing your school grounds is to have..... a Plan!

Before you can begin though, you have to decide how you will co-ordinate the process and who else will help carry it through. The best way to ensure that the project maintains its momentum is to form a **Grounds Action Group** who will provide the impetus for the process. It may be useful for them to nominate a co-ordinator to liaise with other organisations and professional consultants. By the way, whilst the Head Teacher will almost always be involved, their other commitments mean that they are not always best placed for the role of co-ordinator.

A few things for the Environment Committee to bear in mind:

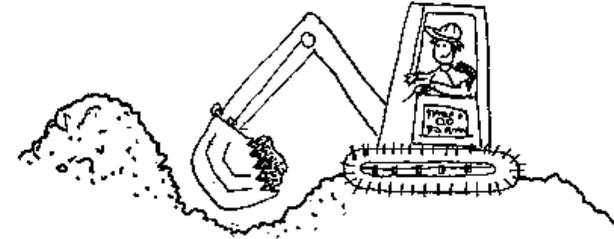
- The development of your school grounds will take a long time. Be prepared for a long-term commitment.
- You will be working as a team and have responsibilities to each other as well as to the wider school community.
- Consult and inform all members of the school community as appropriate.
- Determine your priorities at an early stage.
- Monitor progress continually.
- Allocate tasks to individuals and set completion targets.

Your first task is to take a look at how the grounds are used at the moment and to ask yourselves some questions:

- What would you like to be able to use them for that you do not or cannot at the moment?
- What would you like to be different about them?
- Do they provide the sort of setting that you would like for your school?
- Does the entrance give a good first impression to visitors?
- Would you like a formal area for use as an outdoor classroom?
- Is there a need to create sheltered areas in the grounds?



- How important are they environmentally in the context of the surrounding areas?
- How interesting are the opportunities for play?
- Is there a quiet area?
- Is there sufficient seating?
- Is there a litter problem?
- What curricular needs do the grounds fulfil?
- Whose permission will you need to obtain before you can carry out any work?



THE STEP-BY-STEP PROCESS

1. SURVEYING THE GROUNDS:

Before you can begin to change your grounds you need to have a record of exactly what is there at the moment.

If you don't already have a large scale plan of your school and its grounds you will need to get hold of one from the local authority education department, planning department or perhaps your maintenance contractor. If none of them can provide you with the sort of plan you need you can buy one from an authorised Ordnance Survey stockist. Get them to print it out at A0 size, probably at 1:200 or 1:250 scale.

This is an ideal opportunity to start to link the development process to the curriculum and you could at this point involve the pupils in carrying out the survey. **Learning through Landscapes** produce the **Esso Schoolwatch, Initial Survey Pack** a guide to surveying your school grounds. However, because this is a fairly critical stage in the process it might be the right time to consider calling in a professional who could produce an accurate scale diagram of the school grounds in parallel with the school's own form of survey.

Your survey will need to indicate the exact size and position of various features of the grounds such as:

- | | |
|-----------------------------------|---------------------------------|
| • grass areas and their uses | • ditches |
| • tarmac areas and their uses | • formal paths |
| • paved areas and their uses | • informal paths (desire lines) |
| • trees, shrubs and planted areas | • location of services* |
| • car parking | • slopes |

- walls and fences
- erosion
- steps
- wet areas

*Contact BT, Gas, Electricity, Water and ask them to provide you with a plan showing the location of their pipes and services so that you can plan the new features around them and do not locate anything over them or damage any of them during digging work for ponds, footings etc. In addition to recording the physical aspects of your site you can also look into its history. Local archive material can be researched and you can ask local residents about the past uses of the site. The history might later serve as inspiration for some new feature or use for part of the grounds.

2. ANALYSIS:

Take a photocopy of your survey plan and on it note your other observations about the qualities of the site and its limitations. It will help you later on when it comes to prioritising the things you want to do with the grounds.

Here are some of the things you should be looking for:

- unsightly areas
- good views
- sheltered places
- exposed areas
- overcrowded playgrounds
- under-used spaces
- sunny, hot areas
- shady areas
- noisy roads on the perimeter
- broken fencing
- evidence of wildlife
- vegetation types

Start surveying people's opinions about the grounds; pupils can also be involved by giving them questionnaires to fill in. Here is a sample list of the sort of questions to ask:

- Where is your favourite place in the school grounds?
- Where is your least favourite place?
- Where is the best view in the school grounds?
- Where is the worst view in the school grounds?
- Where do you go outside if it is hot and sunny?
- Where do you go outside if it is cold and windy?
- Where do you sit when you are outside?



- h) Where do you play and run around?
- i) Are there any special places in the school grounds?

3. NEEDS AND WANTS:

Having now completed the survey and analysis it is time to find out from the school community exactly what uses they would want to make of the grounds, what they would like to keep and what they would like to change.

Remember to plan the **whole** of your school grounds involving the whole of your school community, both for the present and the future.

Pupil Power - Let your students know **they** have the opportunity to change their surroundings. Begin with a short 'brainstorming' session with small groups of pupils. Avoid commenting on any ideas, just keep them flowing. Prompt their ideas by asking questions like:

- Do you like being outside in your breaktimes?
- What things do you like doing outside in the school grounds?
- What do you not like about your school grounds?
- What things would you like to be able to do outside?
- What do you like doing outside after school and at weekends?

Group together any common elements. You can then discuss these with the groups and write up a list which they feel represents their thoughts and ideas.

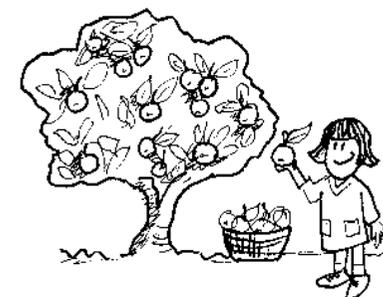
Consult user groups e.g. pupils, teachers, other staff, parents, neighbours, governors about what they want to see in the grounds. Ask them to produce "wish-lists".

Consider other needs e.g. curricular, aesthetic, extra curricular, pupil's behaviour patterns.

Let your imaginations run away with you, you'll have a hard job keeping up with the pupil's ideas anyway! To help you we've listed a few on the next page:



| Feature | Activity |
|----------------------|--|
| Activity areas | Adventure playgrounds, playground markings. |
| Art | Get a local artist in to do some environmental art with the kids; sculpture, mosaic, willow weaving or performance. It won't cost much and everyone will enjoy themselves. |
| Bird feeder | Not all birds will come to a table, cater for those which don't by hanging up a bird feeder full of nuts and seeds. |
| Bird gardens | The best way to feed the birds is to provide them with the plants they naturally feed on. |
| Bird tables | Children and young people love the study of birds, encourage them to come within viewing range and help them through the lean winter months |
| Bird watching hides | If you can't get 'em come and see you go out to see them instead, but don't let 'em see you! |
| Board games | Giant chess, giant connect 4 etc. |
| Boggy areas | Convert those areas that always seem to be wet into a bog garden by hollowing it out a little and introducing native marginal plants. |
| Butterflies and bees | Give them the plants they like to feed and breed on and they'll reward you with ample opportunities to teach about them. |
| Compost heaps | Recycle that organic waste. |
| Container gardens | Brighten up a dull corner by putting some flower filled containers there. |
| Entrance | It doesn't have to be grand but it is the first thing a visitor sees. What sort of a first impression do you want your school entrance to give? |
| Hedges | Trees too tall? Plant a hedge instead. |
| Imaginative features | Design your own seating or build a monstrous lizard out of old car tyres as a play feature. |
| Levels | Flat, uninteresting grounds can have mounds. Sloping sites might be used to hollow out an amphitheatre. |
| Log castle | There are thousands of structures to build and ways of using logs in your grounds |
| Mazes | Make a maze out of balancing beams only a few inches high, plant a hedge maze or paint one on the playground. |
| Mini woodland | Can you extend an adjoining woodland into your grounds or do you have enough room to plant a new wood? You'll probably get an extra grant for it. |
| Murals | Some are purely decorative, some tell a story, some function as games. |

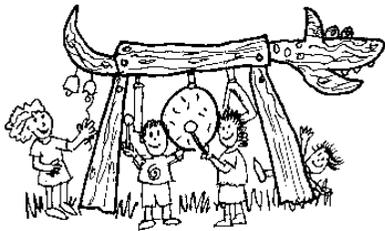




Nesting boxes
Orchard and vegetable garden
Pathways
Pergola
Picnic area
Play house
Play structures



Pond
Raised planters
Sand pit
Screen planting
Seating
Shelter-belts



Sign Posts
Teaching spaces

Theme gardens

Tyres
Welcome area

Wildflower meadow



4. PLANNING CHANGES:

Any changes to the school grounds need to be thoroughly planned, a good way of planning is to start by writing a **brief** for the project. This should be a concise document which begins to assign priorities to the tasks.

Blue Tits and Owls and even Bats can be provided for.

Just where does the fruit and veg in a polythene bag in the supermarket come from?

Nature walks, access to new areas etc.

Provide shade, a place to sit and a structure to hang wind chimes, bird feeders etc.

For daily use in summer & for special occasions like fund-raising barbecues.

A good opportunity for imaginative play.

Utilise recycled materials or buy them new, build something they can climb on, swing from or balance on but remember safety comes first.

Pond dipping, calculating area / volume, observation etc.

Give instant height, form a barrier, make gardening accessible to wheelchair users.

Bring the beach to your school for a variety of activities but try to provide a cover for it.

Hide those unsightly views by planting trees.

Put it in the right place at the right scale and your pupils will love you for it.

Stop the wind whistling through the schoolyard by planting a hedge or a shelter-belt of trees.

Which way do you visitors go to find reception and just which way is North anyway?

Make full use of your grounds as an outdoor classroom by having formal or informal spaces created with seats or mounding.

Stimulate the senses with scented gardens, colour gardens, tactile and even sound gardens.

What a wonderful resource old tyres can be & they're free!

Do the pupils' parents have a pleasant place to wait for them to come out of school?

Look around your grounds for an odd shaped area of grass or the corners outside the football pitch and plant them up with wildflowers. They only need mowing once or twice a year so you might save a little money. Poor soil is best.

Think about the likely outcomes of the proposed changes e.g:

I. **Action:** Provide more play facilities and seating areas in playground.

Outcome: Improved behaviour of pupils during break times.

II. **Action:** Plant a shelter-belt of trees around part of the perimeter of the site.

Outcome: Reduce wind exposure, provide wildlife habitat, screen off unsightly views.

III. **Action:** Develop a wildlife area and outdoor teaching space.

Outcome: Provide a focal point for links to the curriculum.

I. **Action:** Construct raised planters for adoption by each class.

Outcome: Enhance the appearance of the grounds and encourage a sense of responsibility for the environment and ownership of the grounds.



5. GETTING IT DOWN ON PAPER:

You are now ready to start the design process and you should think about enlisting the help of a qualified Landscape Architect or designer if you haven't already. Your education authority may be able to recommend someone to you; alternatively you can contact Learning through Landscapes who will have a list of service providers in your area or you may be lucky enough to have someone among the school community who is qualified to do the job.

If you don't feel ready at this stage to employ a professional you can begin the design process yourself by producing a **zoning diagram**. This is a rough plan on which you decide which areas are best suited to the various activities and features you want and how they will all link together and function as a whole.

Things to bear in mind are:

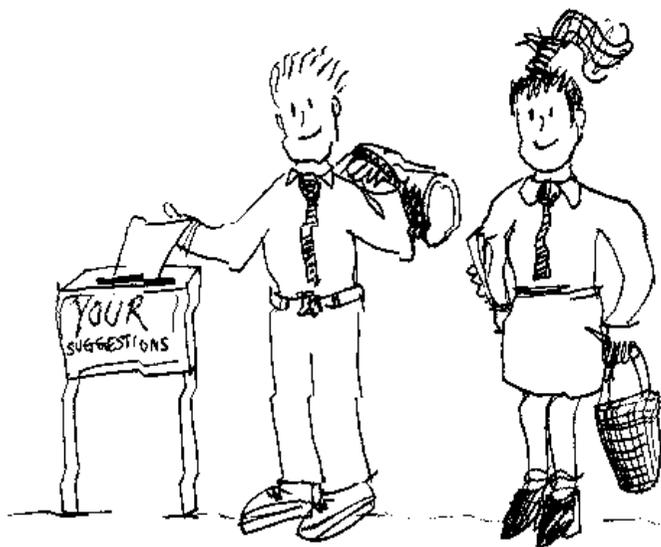
- Which activities require the most or least space
- Which activities can be put together
- Which activities should be kept separate
- Where to locate screening, space division and seating

Next, you or your Landscape Architect will need to prepare a **Draft Development plan** for the whole school grounds. This will begin to integrate the ideas you had in your zoning diagram with the information you have recorded on your survey and analysis maps. You must bear in mind that to be as cost efficient and attractive as possible your ideas must work **with** the landscape not **against** it, so try to fit everything in as naturally and as sensitively as you can.

You might like to involve the pupils by making a model of the school and its grounds. Then make scale models of the types of things you have decided you would like to put in, move them around in the model and discuss which might be the best location for each.

Pupils can also be involved in this phase by drawing their own plans and views.

You should now calculate some rough costings so that you have an idea of how much funding might be needed and how feasible your ideas are. Consider the implications of your ideas in terms of how much extra maintenance, if any, will be necessary e.g. labour, energy costs etc.



6. PUBLICISE AND CONSULT:

- You need to get feedback on your proposals; display your rough Development plan and pupil's work and organise some way of getting feedback e.g. voting on best proposals, suggestion boxes etc.
- Include parents and other interested parties in the consultation/feedback process.
- Encourage "ownership" of the scheme throughout the school community.
- Start thinking about fund-raising methods and get suggestions from school community.
- Take into consideration the critical feedback you have had and try to work the ideas back into your plans.
- It is important to produce a presentable and comprehensible **Landscape Development Plan** to demonstrate that you have considered the best location for each element and how everything will link/work together.

7. MAKE THE PLAN WORK FOR YOU

- The plan will show how you intend to develop a phased implementation of your scheme so that you can spread the costs and target priority elements of your proposals.
- It should be accompanied by detailed costings, at least for the first phase of the proposals. If these seem too expensive you can try to trim them down a little, once you know exactly what you need, you can ring around and perhaps persuade local suppliers to help.
- Go on to produce detailed drawings of specific areas and structures for the first phase of your scheme e.g. paving, walls, pergolas etc. You may need these drawings to help you get the various permissions required before you can start. The drawings will help you with your costings and help solve how to fit everything together.
- The plan should be incorporated into your overall school development plan.
- It will be of great use to you in attracting funding for your scheme.
- Display it in the school to inspire interest and enthusiasm and can be incorporated into a publicity pack to send to local businesses and newspapers to attract sponsorship and media interest. It shows people that you are serious about your intentions and is worth investing some time and money in.
- Plan how your grounds development will tie in to curriculum developments.
- Revise your school maintenance plan and budget in the light of the proposed changes.

8. FUND-RAISING

Fund-raising is vital to the transformation of your grounds. Financial assistance may be available from your local council, up-to-date details should be checked as this is likely to change from year to year.

The four main sources of funding for improvements to school grounds are:

The school budget.

There is rarely any room in the school budget for an extra charge on resources but you will be adding a considerable asset to your school when you implement your scheme and this should be funded in some part by a regular contribution from the budget.

Grants and awards.

There is a list of grant and award schemes included with this handbook.

These are an excellent source of funding and should be investigated thoroughly as schools in different locations and circumstances could qualify for different grants and awards.

The nature of the features you are planning could also have a bearing on which particular grants you might be able to apply for.

Sponsorship.

Talk to neighbouring landowners to see whether they are prepared to contribute anything, this will be easier if you have involved them in the process from an early stage especially if they have something to gain from the implementation of your scheme such as screening of their property from noise or visual intrusion from the school.

Local garden centres and builders' merchants are often willing to be associated with school projects and can be a good source of materials, expertise and labour.

Having a good Development plan and putting together a brochure outlining your plans and your achievements to-date to send to potential sponsors will be a distinct advantage to you as they will communicate your ideas clearly, and show that they are well thought out.

Fund-raising events.

Most schools are expert fund raisers in any case but here are a few ideas just in case:

Take advantage of landscape related national events such as:

National Tree Week

Details available from the Tree Council on 0171 828 9928. (See useful contacts section).

School Grounds Day

Details available from Learning through Landscapes on 0196 284 6258. (See useful contacts section).

Organise your own landscape related events such as:

treasure hunts
barbecues
garden parties
sports days

willow weaving
drama performances
fun run
summer fete

9. GETTING IT ON THE GROUND

Once you have finalised your plans and detailed drawings for phase one and have managed to raise sufficient funds you have to start organising the **implementation** of the scheme.

Do you have any parents with skills in the building or landscape trades or professions who could help with the planning and supervision of the construction? Can one of your sponsors or a voluntary organisation help out?

If the answer is '**No**' to the above questions you can follow these steps:

- Divide the work up into logical segments and draw up an **action plan**.
- Organise expert labour and volunteer labour. To supplement parent and teacher volunteers there is a list of possible sources of volunteer labour included with the this handbook.
- Decide whether you will need to hire any machinery or tools and phone around for the best deals. Using machinery may seem like an unnecessary expense but it can take a surprisingly long time to move earth without it. It can be de-motivating too and you don't want to lose your help at an early stage.



- Order materials to arrive at the right time, consider access for lorries to your site and decide exactly where you want them unloaded (bear in mind that you don't want to have to shift the materials again).
- Get stuck in! Work systematically and make sure that everyone knows when to turn up and what to do when they have. Your pupils will love participating too; decide in advance what they can safely be allowed to participate in and include them in your plans.

Keep a **diary** and a **photographic record** of your progress for display in the school and maybe for inclusion in the brochures you send out with sponsorship requests.

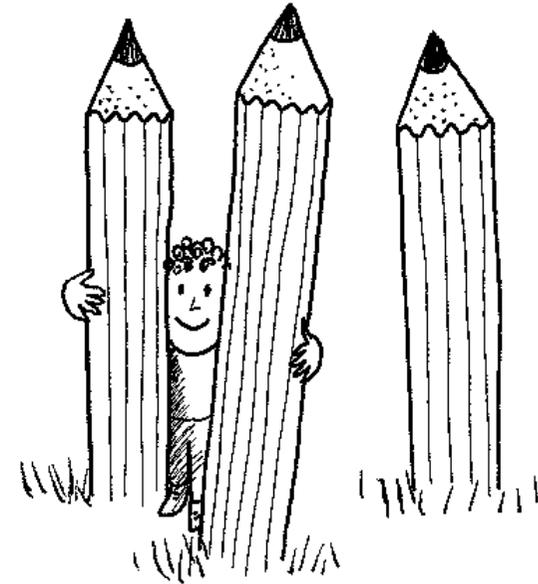
At the end of phase one you'll probably have had some ideas about how to go about phase two or you may have decided to alter the phasing so it wouldn't hurt to sit back and reappraise your plans.

10. KEEPING IT GOING

The project will hopefully gain its own momentum but it helps to keep interest alive and participation active by:

- Keeping the environment committee going on a regular basis.
- Forming an environment club for pupils, parents and staff to start participating in.
- Keeping people informed of progress and reporting back to your sponsors so that they are aware that their money is being put to good use.
- Publicising the next phase of your scheme well in advance.

The improvements will probably take a long time but by setting yourselves achievable goals for each phase, you will be able to look back with a sense of satisfaction. The way in which you are able to enrich the lives of your pupils by following this process will bring its own rewards.



11. MAINTENANCE

Whatever you decide to design for your grounds you should always bear in mind its implications on the school's maintenance budget.

Many new elements in your grounds can be self sustaining in that their maintenance can become part of their educational value e.g. the annual clearing out of a pond or the planting, weeding and care of planters each looked after by a school class.

Devising maintenance plans:

- State the overall aims for the site
- Define what each area will look like
- Say how this is going to be achieved
- Say who is going to carry out the work
- Define your maintenance tasks over a period of time

Keep it simple but precise, make sure it will be easy to update and define the level of maintenance required i.e. Tasks, techniques and timing. Stick to standard mowing regimes if possible it will be cheaper and by designing out areas of grass which require hand mowing and introducing wildflower meadows in areas which do not require the same mowing regime as the football field you might eventually be able to trim a little off your maintenance budget.

12. SUSTAINABILITY

Encourage everyone to take a wider view of the environment and to take responsibility for their role in polluting or preserving it. All schools should have sustainability as a fundamental consideration in the running of the school and the development of the grounds. In order to help you check the sustainability of your ideas we have reproduced on the next page a checklist developed by the Shell Better Britain Campaign (see useful contacts section).

The big advantage of trying out this checklist on your project is that it is simple to use and gives a fairly instant picture of the sustainability issues affecting your project.

Not only does it help you to consider the broader links that may otherwise get overlooked, it gives you an opportunity to put things right wherever practical to do so.

Remember, not all categories in the checklist will apply equally to every project and some categories may not apply at all. Although open to interpretation, the checklist does help you think through the environmental and other impacts of your project, at every stage.

SUSTAINABILITY CHECKLIST

| DOES YOUR PROJECT HELP THE FOLLOWING AREAS | Yes | No | No effect |
|--|-----|----|-----------|
| 1 COMMUNITY PARTICIPATION | | | |
| a) encourage local action and decision-making | | | |
| b) involve your community in developing the proposal | | | |
| c) take into account under-represented groups | | | |
| 2 ECONOMY & WORK | | | |
| a) link local production with local consumption | | | |
| b) increase employment/vocational training opportunities | | | |
| c) improve environmental awareness of local businesses | | | |
| 3 TRANSPORT | | | |
| a) encourage walking or cycling | | | |
| b) encourage use of public transport | | | |
| c) discourage use of cars/lorries | | | |
| 4 POLLUTION | | | |
| a) reduce local pollution, e.g. noise, air, water, land etc. | | | |
| 5 ENERGY | | | |
| a) maximise energy efficiency | | | |
| b) generate energy from renewable resources or waste | | | |
| 6 WASTE & RESOURCES | | | |
| a) reduce waste | | | |
| b) encourage reuse and/or repair | | | |
| c) encourage recycling or use recycled products | | | |
| 7 BUILDINGS & LAND USE | | | |
| a) provide local amenities | | | |
| b) improve access for disabled | | | |
| c) reuse/conservve building(s) | | | |
| 8 WILDLIFE & OPEN SPACES | | | |
| a) encourage use of open space for community benefit | | | |
| b) encourage natural plant and animal life | | | |

Finally, if you are concerned that this exercise might show up your project unfavourably, you may be reassured by the fact that the issues involved are new to many groups. So, if it helps to develop your thinking, this can only be of benefit to your project.

In the checklist:

YES shows a positive benefit, ideally as a result of advance planning.

NO shows a negative effect, the cause of which may have been overlooked, and provides an opportunity to reduce the environmental impact.

NO EFFECT shows either no change as a result of the project or that the category doesn't apply.

Secondary schools in particular might wish to take their school grounds development project a stage further by linking it with or starting up a Local Agenda 21 project such as reduction in the school's energy consumption and waste production, transport sharing or the production of a parish map to help generate a greater sense of understanding of the local community.

Local community groups could be invited to participate or to contribute ideas which would help the community make greater use of the school grounds.

Local Agenda 21 is a process that aims to integrate the social, environmental and economic aspects of development in order that all future development is 'sustainable'. It requires all of us to consider the effects - on the local economy, the local environment and the local community - of every policy and project and then to seek a solution that achieves a realistic balance. It originates from the United Nations Earth Summit held in Rio in 1992 which led to the agreement of an Agenda 21 document detailing a series of strategies for action worldwide.

APPENDICES

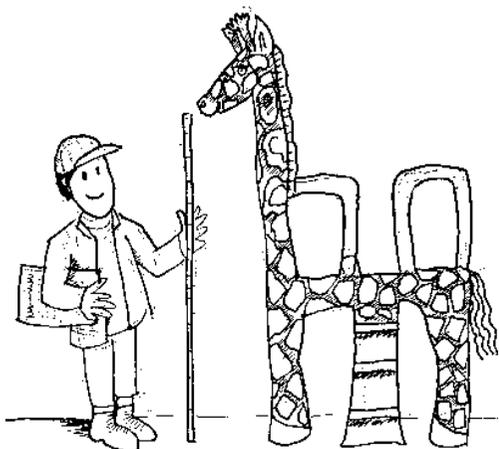
Play - What variety and choice of activities do you have?

Active Play: Adventure play trail, running skipping, ball games

Quiet Play: Giant chess etc. imaginative play, socialising

Think about providing variety to allow choice of activity at breaktimes

Play Equipment - Please contact the Education Health & Safety Adviser at your local council to find out their policy on the installation and use of play equipment e.g:



- Surfacing required beneath apparatus
- Maximum climbing height
- Design advice
- Recommendations for supervision
- Appropriate dress/footwear to be worn
- Maintenance



Manufactured play equipment is very expensive but you have the security of knowing that it has been designed and manufactured to conform with B.S.5696 and/or D.I.N.7926.

If you want to save money and have the skills and manpower to construct your own play equipment then a useful publication to have is "Self-Build Play Equipment" produced by the National Playing Fields Association (see useful contacts section).

Safety - In general the following rules should be applied:

Height - In general, no play opportunity should allow a child to fall from a height greater than 2.5m.

Any play opportunity allowing a fall from a height of 600mm or greater should be installed on impact absorbing surfacing.

Safety zone - Manufacturers are required to calculate a "minimum use zone" around each piece of equipment they supply. These zones should not be allowed to overlap when the equipment is installed.

Beware of potential hazards such as:

Finger, arm and head traps
Sharp edges and protrusions
Overall height of the equipment

Railings and safety barriers
Trip hazards

N.B. The above is for general guidance only. Please obtain up to date information about safety and other requirements before commencing this type of project.

Surfacing - Choice of material is dependent upon many factors:

Durability and stability
Slip resistance when wet
Slip resistance when dry
Drainage
Impact absorption where necessary

Ease of maintenance
Likelihood of contamination
Method of containment
Attractiveness
Cost



You could use:

Woodchip, Bark, Decking, Tarmac (coloured), Concrete, Paving slabs, Brick, Gravel, Cobbles, Grass, Astroturf, Rubber play surfaces...

Think about edges, heavy wear, desire lines (shortcuts people will naturally take) and combinations.



Topography (Landform) - What is appropriate in your School Grounds?

Slopes
Mounds & Hollows
Terracing
Steps

Hedge banks
Ditches
Banks
Ramps

Think about ground water levels and machinery required.

Water features - What do you want from your water feature?

- | | |
|------------------|----------------------|
| Wildlife pond | Ornamental fish pond |
| Bubble fountains | Wall fountains |
| Streams | |

Think about safety, therapeutic effect and ease of maintenance.

Sport - How dominant is sport in the shaping of the grounds?

- | | |
|------------|---------------|
| Football | Netball |
| Basketball | Hockey |
| Rounders | Athletics |
| Volleyball | Tennis |
| Cricket | Cross Country |

Think about avoiding dominance of sport on the site, multiuse pitches, and all weather provision.



Animals - What do you want to teach and how will you organise it?

- | | |
|-----------------------|------------------------|
| Pet corner | Produce (eggs, cheese) |
| Maintenance (grazing) | Therapeutic effect |

Think about your facilities and holiday care, could you offer grazing to other people's animals?

Crops - What do you have space for and what can you make use of?

- | | |
|---------------------------|--------------------|
| Wheat for bread | Herbs for dyes |
| Annuals for dried flowers | Osiers for baskets |
| Hazel for poles/charcoal | Fruit and Veg. |

Think about possible revenue potential from marketing and pleasure/learning from cropping and using.

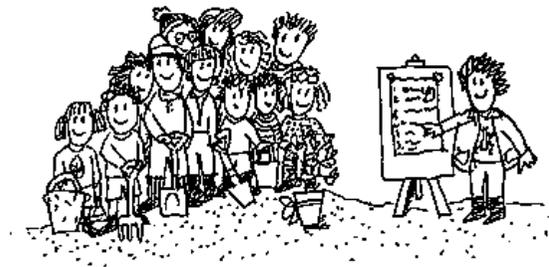
PLANTING

Think about the scale of planting; trees, shrubs, herbaceous plants and bulbs. All planting has soil requirements, what type of soil do you have? What is your reason for planting; animal and bird attraction, scent, fruit, aesthetics?



Trees

Careful choice of species is necessary check the tree's eventual size and spacings required and the degree of maintenance needed. The lists below should help you:



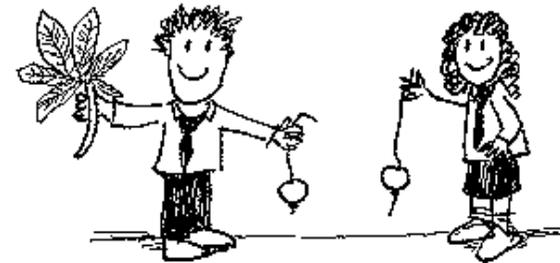
NATIVE TREES FOR ENVIRONMENTAL AREAS

| Proper name | Common name | Height | Comments |
|--------------------|--------------|--------|---|
| Acer campestre | Field maple | 5-15m | Colours yellow or red in Autumn |
| Alnus glutinosa | Alder | 8-20m | Can tolerate v. wet, Winter cones, catkins in Spring, attracts birds |
| Betula pendula | Silver birch | 6-15m | Fast grow/white bark, casts light shade /sandy soils, attracts birds |
| Carpinus betulus | Hornbeam | 6-25m | Similar to Beech but prefers heavy clay soils |
| Crataegus monogyna | Hawthorn | 4-6m | V. thorny, any situation, white Spring blossom, red fruit Autumn |
| Fagus sylvatica | Beech | 6-37m | Large/graceful tree, smooth grey bark, Beech nuts, free draining soil |
| Fraxinus excelsior | Ash | 8-30m | Large tree with light foliage & graceful shape, heavy soils |
| Ilex aquifolium | Holly | 4-15m | Plants are either male & female so need several to ensure berries |
| Juglans regia | Walnut | 5-25m | Slow growing, large tree which may bear fruit after several years |
| Malus sylvestris | Crab apple | 4-12m | Small tree, small white flowers iSpring/ small green apples (jelly) |
| Populus tremula | Aspen | 8-15m | Thrives in all soils, even wet, foliage rustles, yellow in Autumn. Don't plant close to buildings |
| Prunus avium | Wild cherry | 8-25m | Medium tree, white blossom in Spring, cherries attract birds |
| Quercus robur | Oak | 4-25m | Large, long lived. V. good for wildlife supports over 200 species of invertebrates |
| Salix alba | White willow | 10-25m | Elegant tree, long, silky leaves, fast growing likes wet. Don't plant close to buildings |
| Salix fragilis | Crack willow | 5-14m | Large, spreading, rough bark, catkins in Spring, likes wet. Don't plant close to buildings |
| Sorbus aria | Whitebeam | 5-14m | Smallish tree, compact round head. Oval leaves silver at first turning green, white flowers, red fruits, gold foliage in Autumn |

| | | | |
|-------------------|-------------------|-------|--|
| Sorbus aucuparia | Rowan | 6-12m | Smallish tree, pinnate leaves, white flowers then orange/red berries. Attracts birds |
| Sorbus torminalis | Wild service | 6-12m | Medium tree, ascending branches, russet brown fruit & Autumn colour |
| Tilia cordata | Small leaved lime | 6-30m | Large tree, heart shaped leaves & green starry flowers |

TREE SPECIES FOR ORNAMENTAL AREAS

| Proper name | Common name | Height (metres) | Comments |
|---------------------------------|-------------------|-----------------|---|
| Aesculus hippocastanum | Horsechestnut | 7-25m | Large hand like leaves & candelabra flowers in Summer, conkers make this popular. Prefers rich soils. |
| Hamamelis mollis | Chinese witch | 3-4m | Shrubby tree with fragrant yellow flowers Dec-March. Expensive & slow growing but worth while. |
| Malus 'Golden Hornet' | Crab apple | 5m | Small tree with white flowers then small, long lasting, yellow apples |
| Malus 'John Downie' | Edible apple | 5m | Small tree with white flowers the bright red/orange apples |
| Prunus subhirtella 'Autumnalis' | Ornamental cherry | 7m | Small tree with white blossom Nov-March |
| Robinia pseudoacacia | False acacia | 10-12m | Attractive, fast growing pollution tolerant, likes free draining soils |
| Sorbus 'Joseph Rock' | Ornamental rowan | 9m | Small tree with Autumn colour & yellow fruits |



NATIVE SHRUBS FOR ENVIRONMENTAL AREAS

| Proper name | Common name | Height | Comments |
|--------------------|-------------|--------|--|
| Buxus sempervirens | Box | 3m | Hedging or shrub in shade/ semi-shade, slow growing, evergreen |



| | | | |
|--------------------|----------------|------|---|
| Cornus sanguinea | Dogwood | 2.5m | Greenish, red flushed stems, black fruits. Hard prune in March to keep stem colour Mid-green leaves, yellow catkins, good for coppice Rich yellow, scented flowers in early Summer / black seed pods |
| Corylus avellana | Hazel | 7m | |
| Cytisus scoparius | Broom | 2.5m | |
| Euonymus europaeus | Spindle | 3m | Deciduous shrub with flowers then rose red capsules showing orange seeds Evergreen/blue/black berries/ cones Semi-evergreen fast growing shrub tolerant of most soils & shade, shiny black fruits Forms impenetrable, thorny thicket, white Spring blossom & sloes Trailing spp forms dense mound, white flowers & red rosehips Fast growing prickly rose with pinky white flowers & red rosehips Soft silky catkins turning yellow as they open Fast growing with frothy white flowers then black berries for jelly Dense, spiny shrub/yellow flowers then seed pods. Best on poor soils Large shrub with creamy Spring flowers then red/black fruits Flat heads of white flowers then black berries, grows well in damp |
| Juniperus communis | Juniper | 2.5m | |
| Ligustrum vulgaris | Privet | 2.5m | |
| Prunus spinosa | Blackthorn | 5m | |
| Rosa arvensis | Field rose | 0.5m | |
| Rosa canina | Dog rose | 4m | |
| Salix caprea | Grey willow | 5m | |
| Sambucus nigra | Elder | 6m | |
| Ulex europaeus | Gorse | 1-2m | |
| Viburnum lantana | Wayfaring tree | 6m | |
| Viburnum opulus | Geulder rose | 6m | |

SHRUB SPECIES FOR ORNAMENTAL AREAS

| Proper name | Common name | Height | Comments |
|--------------------------|-------------------|--------|--|
| Amelanchier canadensis | Snowy mespilus | 3m | Thrives on moist, well drained soils. Long white flower racemes in April , leaves colour in Autumn |
| Berberis x stenophylla | Barberry | 3m | Forms dense, thorny barrier of arching branches in most soils. Golden flowers in April |
| Cornus alba 'Sibirica' | Red bark dog wood | 3m | Suckering, vigorous shrub with red Winter stems, cut back to base every 2nd year |
| Cotoneaster conspicuus | Cotoneaster | 2m | Evergreen/dense arching, white flowers & red berries |
| Cotoneaster microphyllus | Dwarf Cotoneaster | 25cm | Evergreen with wide spreading branches, white flowers, red berries, good groundcover |
| Genista hispanica | Spanish gorse | 1m | Compact form of Gorse with prolific gold flowers |

| | | | |
|---------------------------------------|------------------------------|-------|---|
| Hebe 'Red Edge' | | 0.75m | Round evergreen shrub with red edged leaves & purple flowers |
| Hedera helix & variegata | Common Ivy Variegated Ivy | - | Evergreen groundcover with either dark green leaves or cream/ yellow variegated form |
| Hypericum calycinum | Rose of Sharon | 450mm | Vigorous, dense carpet, bright yellow flowers tolerates most conditions |
| Lonicera pileata | | 800mm | Evergreen, dense shrub grows well in shade, attracts wildlife |
| Mahonia 'Charity' | | 2m | Strongly formed evergreen with prickly leaves & scented yellow flowers in early Spring, then fruits |
| Potentilla fruticosa (& cultivars) | | 1.5m | Grows well in free draining soils & sun, prolific flowers in a range of colours depending on cultivar |
| Vinca major | Greater periwinkle | 300mm | Spreading, vigorous evergreen with purple/blue flowers Apr-June |



HEDGE SPECIES

| Proper name | Common name | Height | Comments |
|-----------------------|-------------|----------|--|
| Buxus sempervirens | Box | 0.30m-1m | Shade /slow grow evergreen |
| Crataegus monogyna | Hawthorn | 1-5m | Prickly stems, slightly untidy hedge with Spring blossom |
| Euonymus japonicus | | 1-2.5m | Dense waxy leaved evergreen has fresh green new growth, not fully hardy |
| Fagus sylvatica | Beech | 2-3m | Retains dead leaves in Winter, attractive tall hedge |
| Ligustrum ovalifolium | Privet | 1.5-2.5m | Fast growing dense hedge but frequent trimming |
| Lonicera nitida | | 1m | Evergreen small leaved dense hedge, attractive/frequent trim |
| Prunus laurocerasus | Laurel | 2-4m | Large leaved wide hedge fast growing, scented flowers, needs lots of space |
| Pyracantha spp | | 1-2m | Very thorny, dense hedge, attractive with red/ yellow berries |



HERBACEOUS SPECIES

Wildflowers, perennials and annuals are very rewarding as they grow fast and provide a wide range of flower colour and form. Ornamental species will mostly prefer improved soils, however, wildflowers are best grown on poor soils and therefore, choosing the appropriate species for your soil type is very important. The following lists are intended as a guide:

CALCEREOUS SOILS

Wild Basil
Ladys Bedstraw
Clustered Bellflower
Wild Carrot
Cowslip
Ox-eye Daisy
Goats Beard
Common Knapweed
Greater Knapweed
Black Medick
Hoary Plantain
Sanfoin
Small Scabious
Self Heal
Birdsfoot Trefoil
Horseshoe Vetch
Yarrow

HEAVY CLAY SOILS

Meadow Buttercup
White Campion
Cowslip
Cats Ear
Ox-eye Daisy
Common Knapweed
Meadow Sweet
Black Medick
Ribwort Plantain
Yellow Rattle
Ragged Robin
Self Heal
Common Sorrel
Birdsfoot Trefoil
Kidney Vetch
Yarrow

SANDY SOILS

Ladys Bedstraw
White Campion
Wild Carrot
Ox-eye Daisy
Harebell
Rough Hawkbit
Black Medick
Wild Mignonette
Yellow Rattle
Birdsfoot Trefoil
Lesser Yellow Trefoil
Kidney Vetch
Vipers Bugloss
Weld
Yarrow

If the area is shaded or wet then this will change the varieties you can grow, contact a wildflower nursery for advice.

USEFUL CONTACTS

| Name | Address | Description | Contact info |
|-------------|--|--|---------------------|
| ACTAC | (Association of Community Technical Aid Centres) | <i>National network of centres, groups and individuals providing professional and technical skills in support of community projects.</i> | Tel. 0151 7087607 |

| | | | |
|------------------------------------|---|---|---|
| BTCV | 64 Mount Pleasant Liverpool L3 5SD (British Trust for Conservation Volunteers) 36 St. Mary's Street Wallingford OX10 0EU | <i>Support for community groups carrying out practical conservation work. Tool loan / hire. Conservation training.</i> | Fax. 0151 7087606 Tel. 01491 839766 Fax. 01491 839646 |
| Centre for Accessible Environments | Nutmeg House 60 Gainsford Street London SE1 2NY | <i>Advice on designing environments which are accessible to everyone and administers a register of Architects with experience of designing for disabled people.</i> | Tel. 0171 3578182 Fax. 0171 3578183 |
| Charity Projects | UK Grants Dept 74 New Oxford Street London WC1A 1EF | <i>Grant-making arm of Comic Relief.</i> | Tel 0171 4361122 Fax 0171 4361541 |
| Common Ground | Seven Dials Warehouse 44 Earlham Street London WC2H 9LA | <i>Emphasis on working in association with the arts and promoting local distinctiveness.</i> | Tel 0171 3793109 Fax 0171 8365741 |
| Disability Action | 2 Annadale Avenue Belfast BT7 3UR | <i>Projects: Parish Maps, Save our Orchards, Manifesto for Trees. Aims to remove the handicap from disability. Covers employment, training, sport, access, transport and information.</i> | Tel 01232 491011 Fax 01232 491627 |
| Disabled Living Foundation | 380 / 384 Harrow Road London W9 2HU | <i>Practical, up-to-date information and advice on all aspects of disability. Training courses and publications.</i> | Tel 0171 2896111 Fax 0171 2662922 |
| Forestry Commission | 231 Corstorphine Road Edinburgh EH12 7AT | <i>Administers the Woodland Grant Scheme for planting, restocking and managing new and existing woodlands (even very small ones).</i> | Tel 0131 3340303 ext 2322 Fax 0131 3344473 |
| Horticultural Therapy | Goulds Grounds Vallis Way Frome Somerset BA11 3DW | <i>National charity promoting the enjoyment and benefits of gardening - particularly for people with disabilities. Publications: magazines, leaflets, books. Tape magazine and advice line for visually impaired gardeners.</i> | Tel 01373 464782 |
| Learning through Landscapes | 3rd Floor, South Side The Law Courts Winchester SO23 9DL | <i>Pioneers in the field of encouraging schools to improve their grounds and community involvement. An excellent range of practical publications and videos. Membership and grant schemes.</i> | Tel 01962 846258 Fax 01962 869099 |
| National Federation of City Farms | The GreenHouse Hereford Street Bedminster Bristol BS3 4NA | <i>Promotes and supports sustainable regeneration through community managed farming and gardening. Publications: Newsletters and technical information sheets.</i> | Tel 0117 9231800 Fax 0117 9231900 |
| National Play Information Centre | 359 - 361 Euston Road London NW1 3AL | <i>Provide information, advice and publications on all aspects of children's play and related issues including legislation, safety,</i> | Tel 011 3835455 |

| | | | |
|--------------------------|--|---|--|
| | | <i>design of playgrounds and play work.</i> | Fax 0171 3873152 |
| | | <i>Publications: Information sheets including one on Grants for Children's Play (free). Reference library service.</i> | |
| NPFA | National Playing Fields Association 25 Ovington Square London SW3 1LQ | <i>Provides technical advice on policy, standards and practical initiatives to save and create outdoor recreational facilities.</i> | Tel 0171 5846445 |
| Permaculture Association | PO Box 1 Buckfastleigh Devon TQ11 0LH | <i>Advice on the principles and practices of Permaculture, local contacts and links to local Permaculture schemes, training, publications, videos for rent, advice on setting up new schemes.</i> | Fax 0171 5812402 Tel 01892 825049 |
| RIBA | Royal Institute of British Architects Community Architecture Resource Centre 66 Portland Place London W1N 4AD | <i>CARC administers the RIBA/BT Community Projects Fund which gives grants for feasibility studies including the cost of professional fees.</i> | Tel 0171 5805533 Fax 0171 2551541 |
| RNIB | Royal National Institute for the Blind 224 Great Portland Street London W1M 6AA | <i>Run a scheme called The Sensory to encourage the provision of facilities to enable everyone to actively participate in the environment.</i> | Tel 0171 3881266 Fax 0171 3882034 |
| Schoolscapes | Schoolscapes 11a Wrecclesham Road Farnham Surrey GU9 8TY | <i>Professional school grounds development plans. Playground equipment, seating, shade structures. Free advisory service and grant funding advice.</i> | Tel. 01420 477133 Fax 01420 477133 e.mail: school.scapes@virgin.net |
| Tree Council | 51 Catherine Place London SW1E 6DY | <i>Organises National Tree Week annually. Promotes the planting and proper care of trees in urban and rural settings. Grants available.</i> | Tel 0171 8289928 Fax 0171 8289060 |

BIBLIOGRAPHY

Adams E. A report on the Use, Design, Management and development of School Grounds. Learning through Landscapes

Bains C. (1985) How to make a Wildlife Garden. Elm Tree Books

Booth P.R. (1990) Ecology in the National Curriculum - A Practical Guide To Using School Grounds. Learning Through Landscapes

British Trust for Conservation Volunteers. (1984) DIY Conservation Pack. Wembley Press, Reading.

Cornell B. (1979) Sharing Nature With Children - A Parents and Teachers Handbook. Exley Publications.

Department of Education and Science. (1990) Building Bulletin No. 71 The Outdoor Classroom. (London HMSO)

Directory of Social Change. (1978) Campaigning and Lobbying.

Elstgeest J. and Harlen W. (1990). Environmental Science in the Primary Curriculum. Paul Chapman Publishing Ltd.

Emery M. (1986) Promoting Nature in Cities and Towns - A Practical Guide. Groom Helm on behalf of the Ecological Parks Trust

English Nature. (1991). School Nature Area Action File. Nature Conservancy Council, Peterborough

Flatt G. (1989) Pond Design Guide for Schools. Hampshire Books on behalf of Hampshire County Planning Department

Nature Conservancy Council. (1988) Conservation Matters Number 2. Nature Areas and the Primary School Curriculum

Nature Conservancy Council. (1988) Conservation Education Matters

Skinner E. (ed). Directory of Grant Making Trusts. Charities Aid Foundation

Wood J. and Littlewood M. (1996) A Guide to the Management & Maintenance of School Grounds. Learning Through Landscapes

