

The Outdoor Classroom 2

Contact: josie.winch@fulcrumfirst.com

www.fulcrumfirst.com

Where can ideas be found in order to create a valuable educational resource for your school grounds? The best advice is to gain inspiration from the individual school and the catchment area. Use every available resource at your disposal and gain active participation from pupils, parents and teachers.

People

People are the most important resource. What nationalities are pupils attending the school? Approach the parents and see if they would like to develop a small area in the style of their original country. Most countries have their distinctive growing techniques and plants. The results are of educational interest and would help to break down barriers that often exist between people of different nationalities. Make contact with elderly people in the area. They may be able to remember the types of plants that grew in that locality when they were children. Gardens, both plants and planting designs, have changed in character over the last 50 years.

Local History

All places have a history. Stories of local characters, tragic or humorous events, can all be encapsulated in the form of a mural or tile or broken china mosaic. Simple weatherproof materials can bring a depressing wall to life.

Exploration of the countryside existing before development can lead to interesting discoveries. What is the geology of the area? Was there a hazel, willow or sweet chestnut coppice or an orchard in the area? A long forgotten stream or pond? A clay or gravel pit? This can also give a guide to the type of plants that are likely to thrive on the grounds. There is a greater chance of success with plants that are well adapted to the area.

Existing Features

All too often, trees are felled and structures dismantled to make way for the new grand plan. A different, less wasteful approach is to attempt to incorporate these into the new design. Climbing structures that are no longer used but are difficult and costly to remove can be transformed into pergolas. A mesh can be attached and climbing plants trained through. If a corner of a tarmac

playground is in need of repair, why not enclose it and use it to investigate recolonisation by plants and insects? The observations of erupting tarmac are a fascinating educational exercise. Mounds or natural inclines can be arranged into an amphitheatre. Overgrown or dangerous trees can be coppiced instead of felled. The trunks can be used as simple seats, carved into totem poles or used for climbing. Branches can be pegged down to form pathway edges. The common management technique of burning waste organic material is environmentally undesirable and unless linked to heating or creating charcoal, should be avoided.

Observing Nature

Trees provide shelter and a microclimate for other plants. The sunny side of the drip line of a tree (where the water drips down from the canopy) is a very fertile area for developing a plant bed. Mints, soft fruits and currants are particularly happy in this situation.

A study of trees and grass in a natural setting shows that they do not thrive well together. The attempt to maintain grassy areas under trees is both expensive and usually unsuccessful. Leaves from the trees fall in Autumn and kill the grass if they are left on the ground. Yet these leaves are necessary for maintaining soil structure and the health of the soil and tree. A conflict is thus created and becomes costly to fight. A more satisfying and successful solution is to work with nature and use it to its full potential. Woodland species, such as Primroses, Violets, Dandelions, Blackberries, Daisies, Mints, Lemon Balm and bulbs can be planted in a wild area as far as the drip line with a pathway for access to approach the tree trunk.

Recycling and Reuse

Schools are a focal point for the family community and are visited most days. This makes schools an ideal site for collection of recyclable

materials. Paper and Aluminium are the most profitable items for schools to collect.

Green waste is a valuable asset for any grounds. Creation of bays and containers to store leaf mould, woody material for shredding and branches of willow, hazel, bamboo etc for den construction would benefit the school by providing a ready supply of fresh soil, mulch and play resource.

Many materials that are considered to be rubbish can be very useful. Reuse of materials is, energetically speaking, preferable to recycling. Rubber vehicle tyres, that cannot be retreaded, have been used successfully in America, as a building material. Tyres can also be used to create playground structures, small ponds and well insulated compost bins. Strong walls can be built using tin and steel cans cemented together. The cement forms a strong lattice work. Glass bottles can be used to create interesting structures and lighting effects. Broken pottery and bottle tops create murals. Free materials are well worth investigating if a structure is required.

Soils and Subsoils

Heavy clay soils can be used to make pots and, mixed with straw and dried, can create an effective plastering material. When compressed, clay can hold water, and so a natural pond can be created. Soft chalk can be cut and carved. Hard chalk is a washable drawing material that can be used to draw temporary games or pictures on tarmac playgrounds. Gravel can be used for pathways. Sand makes a soft safety surface and provides excellent drainage. It can also be washed and coloured and used to make weather resistant pictures. Flint can be made into tools. It can also be used decoratively on walls or floors. By using local materials, children can be introduced to their surroundings and learn to appreciate and place a value on the natural resources in their locality.

Novelty Features

A Giants Garden.

An area planted with very tall plants is awe inspiring. Sunflowers, Artichokes (globe and Jerusalem), Great Mullein, Teasel, Fennel, Cow parsley and Saw Thistles are all impressive plants. The area can be bordered by giant objects. ie Giant pencils, paint brushes, rulers etc. The area can be used in the maths class for looking at plant growth rates and the nature class for observing flowering strategies.

An Aromatic Garden.

Scented plants can be particular stimulating to partially sighted or hard of hearing children. The 'smelly garden' could take the form of a herb Spiral. A raised spiral planting strategy can be used to grow plants with a wide range of habitats. -Sunny and dry, sunny and wet, shaded and dry or shaded and wet. This allows the growth of a wide range of herbs in a small area. A supply of herbs are useful in the teaching of cookery/medicine.

Stone Garden.

Interesting rocks and pebbles, collected by children during their holidays can be arranged into patterns or stepping stones in wet or grass denuded areas. It is illegal to remove large numbers of stones from one site.

Vegetable plots.

The composting mound (described in a 'soil series' Leaflet) is ideal for growing vegetables. A slow release of nutrients and heat with a high water holding capacity is likely to produce good results. The conflict between man and other creatures is at its greatest with food production. The growing of vegetables introduces children to the practicalities of producing food.

The Three Sisters.

A South American traditional planting scheme involves growing sweetcorn, beans and marrow in the same manure filled drill. This planting scheme provides an interesting model to investigate plant associations. Six of each plant is necessary to ensure fertilisation.

Pergolas and Trellis.

Climbing plants can give a wonderful all encompassing jungle sensation and provide shade at just the time of year when it is required. Plants can be trained up any existing ugly structures

and transform them. Sweet Chestnut and hazel make loose weave fencing.

Willow Structures.

Willow is a highly versatile, hardy and useful tree. It can regrow easily from a cutting and is supple enough to be woven into any shape. Construction of a living structure is described in the 'Clean air' series. Children are delighted by the concept. They use the structure for imaginative games. -It can be a prison, a secret arbour, a castle or a house. It is strong, flexible, beautiful and will regrow if damaged. It also can provide materials and experience for the technology class.

Amphitheatre.

An amphitheatre provides a pleasant seating arrangement for outdoor events, a quiet area for children at break times and a good discussion platform. In South Wales, Blackwood school created an amphitheatre using live willow for screens and seating. Discarded vehicle tyres rammed with earth and built into a mound can also be a cheap method of creating the required structure.

Birds.

Bird tables and nesting boxes attached to structures or trees in Autumn provide interesting observation exercises. Interesting feeding mechanisms can be devised by the children for both birds and squirrels. Birds are excellent at controlling plant pests and so will be very valuable in any plant project.

A Sun Dial.

Sundials can be spray painted onto Tarmac or made with stone or wood on grass. The child is the gnomon and the standing position alters with the time of year. A good teaching tool for mathematics and the Earth and beyond.

Butterfly Garden.

Growing a range of perennial plants, such as Buddlia and Holly, that are attractive to butterflies is something all schools should endeavour to do. There is a real danger of extinction of several species of butterfly. The greatest success can be achieved by growing within an area protected from wind, surrounded by a wall or hedge.

A Pole Lathe.

Children, under adult supervision are capable of turning and sculpting wood. A pole lathe can be simply constructed using whippy branches.

A Kiln.

A clay subsoil can be used to make pots. Blue clay is the best. An earth kiln can be constructed to fire the pots.

A Solar System Model.

A Wandsworth school has developed a "Solar Walk" whereby scaled models of the planets are placed within scaled distances from the sun. The models are built on a scale of 1 to 1 Billion which means every millimetre on the ground represents 1000 Km in space. The Sun is 1.4 M across and all planets are symbolised to scale in a statue form. The school grounds do not hold all the planets and so the statues are accommodated in other schools or public buildings. This aids the visualisation of the scale of the solar system.

Weather Station.

Children can be encouraged to be aware of climatic conditions by setting up very simple equipment to monitor fluctuations in temperature, wind speed, rainfall, daylight hours and lunar phases. These measurements can form the basis of many science projects.

Excavations.

Digging a short, supported tunnel underground can create an interesting environment for children to explore. Ant nests and worm activity observation points can be incorporated.

Assault Course

The maintenance of a grassy area for sports activities can be very expensive and under utilised. It may be preferable to incorporate an assault course or trim trail in the grounds. This could take the form of a track made from shredded tree bark or specialist gravel with various athletic tasks along the way. eg hurdles, long jump, ball in a basket attached to a tree, poles to climb, mini goal posts, ball control courses etc. Sports walls are ideal for a wide range of curriculum sports when space is limited.

Camping Areas.

School grounds for an overnight camp provide an area close enough to home so as not to be too threatening for the less adventurous children. Outdoor cooking skills, building camp fires, erecting tents and being economical with water are all skills to be learnt.