GET GROVING! department for children, schools and families



Do the children in your setting know carrots grow in the ground? Or that apples grow on trees? This information sheet celebrates the work of Growing Schools, with a focus on early years. It shows how children are never too young to learn about the living world and in particular where our food comes from.

Growing Schools began in September 2001, amid concerns that children of all ages are becoming distanced from nature. To enable children to experience the connections between the food they see in the supermarkets and the land that produced it, Growing Schools offers teachers and early years practitioners practical advice and resources.

Involving children in growing projects in your setting not only gives them the chance to experience the rewards of growing first-hand, but also helps to develop an understanding of healthy diets, raise awareness of where food comes from and how we rely on plants for food, and introduces a range of environmental issues.

Here we will look at:

- how children learn through growing
- getting started where to plant, what to plant and when to plant
- how to care for your plants and the environment
- your basic gardening toolkit
- staying safe in the garden
- how home-grown food can encourage good health.

Learning through growing

Children love to nurture plants and quickly become competent in taking the lead. Every stage of growing things gives children a real sense of purpose and satisfaction. A growing project in your setting is also a fantastic way to involve parents – it may even inspire them to start growing at home!

There are many planned and spontaneous growing activities children can get involved in throughout the year that will enrich their learning, including:

- digging and preparing the soil
- sorting and filling pots
- planting seeds, planting seedlings out, watering and weeding
- feeding, monitoring for pests
- harvesting, sorting

- preparing, cooking and storing
- eating!

In each of these hands-on activities children will learn to listen, observe carefully and to take responsibility. At the same time they will:

- develop new understandings of the natural world and how it works.
- use a wide range of vocabulary to talk about and describe plants and processes involved in growing.
- work with you to solve problems such as how to deal with pests or make watering easier.
- gain mathematical skills while sorting fruit, pots and seeds.

Where to plant: thinking about your space

The amount of space you have will determine what kind of growing containers and arrangements you can have. You may be lucky enough to have the space to create an allotment-type garden with raised beds and even a greenhouse (suppliers now have a range of plastic greenhouses which are safer and more affordable than the glass house variety – see 'Further resources' for more information).

Even the smallest garden, however, can accommodate containers made from tyres, sinks, grow bags, window boxes and hanging baskets. Use this as an opportunity to recycle dustbins and old sand and waterplay trays (drill holes in the bottom and fill the bottom with gravel to allow for drainage).

If your area is paved, you could even lift some paving slabs – making a patchwork effect – for manageable mini-plots which children can easily reach when planting and picking.

Growing Schools

'Growing Schools aims to give all children the opportunity to connect with the living environment, whether it has an inner city window box or a vast country estate, a school veg plot or a natural woodland. Interacting with living plants... provides a very rich, hands-on learning.' Growing Schools, www.growingschools.org.uk



What to plant: choosing plants for your setting

If you've never gardened before, you may feel daunted by the amount of choice on offer when considering which plants to grow. Don't worry – it will be fun to learn alongside the children, and most gardeners are generous with their advice and support so don't be shy about asking for help. Find an enthusiastic parent or grandparent, make friends with your local garden centre, contact your nearest allotment association and/or get a good 'starting gardening' book (for more ideas see 'Further resources').

Put the word out and you will be amazed at the amount of offers of advice, free seeds, cuttings and other support you will get from the community.

Meanwhile, here are a few tips to get you started:

- plants have different requirements for sun, shade and soil – check how much sun your garden gets, and what type of soil you have before choosing which plants to grow.
- choose crops that will be ready to harvest outside holiday closures. For example, you may want to choose varieties of strawberries that fruit in June and runner beans that crop in September.
- fast-growing annual crops such as salads will enable the children to see

- the whole process from planting through to eating in one season.
- consider permanent perennial plants.
 Many herbs such as mint, fennel, sage, lavender and rosemary will give a rich range of tastes and smells to add to the sensory experience of your garden year on year.

What you need: your gardening toolkit

Organise storage close to your growing areas to give children easy access to all the gardening equipment. Mark shelves and containers so that children can get into the habit of returning cleaned equipment to the right place after use.

Ensure children have protective clothing appropriate to the weather conditions, especially wellies. Provide hand-washing facilities near the in/out door – and somewhere to wash mud from wellies, tools and equipment.

To get started you will need:

- flower pots
- seed trays, from large to small
- peat-free potting compost for containers or loam top soil for growing beds
- watering cans and buckets
- twine, canes, plant labels
- child-sized long-handled tools for digging, raking and sweeping

Plants for playing and learning

A growing project can provide wonderful opportunities for playing and learning, as well improving the external environment.

- Plant herbs like mint and lemon balm for sensory and textural experiences and to encourage role play, providing materials for making potions, perfumes or dinner in an outdoor home corner.
- Grow beans up bamboo or hazel poles to create a wigwam that children can use as a den.
- Link your growing project to story time –
 Jack and the Beanstalk and *The Enormous Turnip* are classics, but there will be many
 more in the library.
- In winter, use seeds harvested from sunflowers or dried beans and peas for a range of sorting and counting games.
- Get a 'seed sprouter' from your local health food shop and experiment with sprouting a range of nuts and seeds for tasty salads throughout the year. It only takes a matter of days to sprout alfalfa, sunflower seeds or mung beans.
- Take groups of children to your local market or supermarket to look at other vegetables and fruit – what is grown locally and what is grown further a-field.
- Visit a local farm or 'pick your own' to see how fruit and veg are grown in bulk.



- child-sized hand tools trowels in particular, plus dustpan and brush
- child-sized wheelbarrows.

Caring for your plants: watering, weeding and feeding

Helping plants thrive is hugely satisfying and offers lots of learning opportunities. Drawing up a timetable/calendar of activities will help you stay on top of the work needed to help your plants thrive.

Watering It is always worthwhile having an outdoor tap in your setting for watering your plants and clearing up after messy activities such as digging and



planting. A stopcock indoors can prevent it being turned on out of hours. The children will love using watering cans and hose pipes or constructing their own watering systems using guttering etc. However, remember to:

- watch out for over enthusiastic watering and 'drowning' of tender seedlings.
- make arrangements to ensure watering continues when the setting is closed for long periods.

Weeding Mulching (covering the soil surface) will reduce weed growth as well as helping to retain moisture. Garden centres sell a range of mulching materials such as bark chippings, gravel and slate. Take advice and lay landscape fabric underneath where possible. Helping children distinguish between the seedling you want to grow and weeds will also encourage their observation skills and language: describing what to look for and noticing similarities and differences. If you are not sure yourself, get a good reference book and/or advice from an expert parent or local gardener.

Feeding Good quality soil will reduce the need for feeding. Some plants however – like tomatoes, for example, and plants in small pots – will need regular doses of plant food. Remember to store plant food safely in a lock up cupboard.

Caring for the environment: conserving water, making compost, dealing with pests

Your growing project can introduce children to a wide range of environmental issues – from how the seasons and weather affects the way plants grow, to the importance of or dangers posed by insects in the soil and on the plants

themselves. And research shows that if children learn to care for the environment from a young age they are more likely to care for it when they grow older.

Conserving water A water butt is an environmentally friendly way of collecting water from a rainfall down-pipe and saves your water bills. Collect the water in a butt by attaching guttering and a down pipe to a shed or playhouse roof. Make sure your water butt has a fitted lid, and child-reachable tap. Only use the rainwater for watering plants and for cleaning mud off wellies and tools – not for water play.

Making compost Building a compost heap is great way to learn about recycling green waste such as fruit peels or raw vegetable waste from lunch and snack times. See 'Further resources' for practical advice on different types of compost makers and lots of ideas and support (aimed mostly at primary school teachers – but easily adapted for younger children). The children will enjoy watching the worms at work on their apple peels – and the compost will make rich plant food for the following year's potting.

Dealing with pests Not all insects are harmful to plants and the children will enjoy observing the range of insect life around your growing beds. Garden Organic (see 'Further resources') has lots of advice about safe ways to deal with pests. For example, 'good' bugs that attract and support wildlife that benefits certain crops can be encouraged with companion planting:

- grow carrots and leeks together.
 Both have strong scents that drive away pests.
- plant nasturtium with cabbages to keep them free of caterpillars.
- plant dill to attract aphid-eating hoverflies.

Staying safe

Growing should be fun, safe and healthy. As with any other activity it is important to check for hazards and minimize unnecessary risks. Here are a few tips:

- make sure children have the right clothing for the weather – wellies and waterproofs on rainy days, hats and suncream on warm sunny days.
- choose tools carefully and store them safely. Make sure the children know how to use them properly, and never leave them lying around.
- wash fresh cuts well with cold running water or a proprietary wound wash.
 Cover existing cuts with sticking plasters before gardening, and check tetanus vaccinations are up to date.
- teach children that not all plants are safe to eat and to always check with an adult being putting anything in their mouths (for more information see 'Further resources').
- check digging areas for cat and dog mess and teach children to keep muddy fingers away from their mouths.
- make sure the children always wash their hands after handling soil – especially before eating.
- don't use chemicals in your garden.
- provide gloves for children with sensitive skin or eczema.

If you are uncertain on any aspect of safety outdoors, check with RoSPA (see 'Further resources').

Further resources

This information sheet was produced in partnership with Learning through Landscapes (LTL), the national charity that helps early years settings and schools make the most of their outdoor space for play and learning. Similar resources are available through LTL's Early Years Outdoors membership service. Members can access a comprehensive library of resources from the Member Services pages of LTL's website, including:

- Playnotes The Living World
- Curriculum Support Why young children need contact with nature
- Advice sheets Drought resistant gardening, Flower power, Fruit within reach, Gardening for wildlife, Lowallergen gardens, Organic gardening, Planting (including poisonous plants), Safe, sensory plants

To find out more about membership call 01962 845811 or visit www.ltl.org.uk.



Websites

- Growing Schools is a DCSF initiative that offers early years practitioners and teachers practical advice and resources to enable children to experience the connections between the food they see in supermarkets and the land that produced it. Visit www.growingschools.org.uk
- The BBC has a great website with lots of helpful advice and resources for gardening with children. Visit www.bbc.co.uk/gardening/garden ing_with_children.
- Garden Organic (the working name of HDRA, the national charity for organic growing) offers fact sheets on gardening organically, a free school's membership scheme plus an advice line. Visit www.gardenorganic.org.uk and/or telephone 024 7630 3517.
- The Royal Society for the Protection of Birds (RSPB) provides education, support and advice about attracting birds to your nursery garden. Visit www.rspb.org.uk and/or telephone 01767 693690.
- The Royal Horticultural Society runs a Campaign for School Gardening and supports children's gardening projects across the UK with free membership for all educational settings. Visit www.rhs.org.uk and/or telephone 0945 2605000.
- The Gardening and Growing Box from Early Excellence has resources, children's books and curriculum advice. Visit www.earlyexcellence.com and/or telephone 01422 311314.

 RoSPA (Royal Society for the Prevention of Accidents) has information about safety in the garden. Visit www.rospa.com and/0121 248 2000.

Products

- Suttons has a fund-raising catalogue which allows you to keep 20 per cent of sales of seeds and plants and a wildlife range. Visit www.suttonsseeds.co.uk and/or telephone 0844 9222104.
- Active Gardening supplies including small, plastic greenhouse structures.
 Visit www.activegardening.co.uk and/or telephone 0845 533 268.
- For mail order bird food, composting systems, native wildflowers and wildlife gardening try Wiggly Wigglers. Visit www.wigglywigglers.co.uk and/or telephone 01981 500391.
- For books, ideas and a range of equipment for outdoor play including growing things visit www.mindstretchers.co.uk and/or telephone 01764 664409.
- The Little Rotters Composting Club has practical advice on different types of compost makers and lots of ideas and support (aimed mostly at primary school teachers – but easily adapted for younger children). Visit www.littlerotters.org.uk and/or telephone 0116 222 0238.

Books and other publications

 Little Book of Growing Things: Little Books with Big Ideas by Sally Featherstone

- (Featherstone Eduction Ltd, 2003), ISBN-13 978-1904187684
- Plants, Gardening and Play A Guide to Using Plants for Informal and Extra-Curricular Activities by Liz Russell (Southgate Publishers, 1997) ISBN-13:978-1872865270
- Right Plant, Right Place: Over 1400
 Plants for Every Situation in the Garden
 by Nicola Ferguson and Frederick
 McGourty (Cassell Illustrated, 2005)

 ISBN-13: 978-1844031481
- Grow it, Eat it Simple gardening projects and delicious recipes (Dorling Kindersley, 2008) ISBN-13: 978-140 5328104
- Gardening with Young Children by Beatrys Lockie (Hawthorne Press, 2007) ISBN-13:978-1903458389

Healthy eating

Growing projects provide lots of opportunities for physical activities in the fresh air. And if you plant easy-to-grow crops like strawberries and broad beans, when you reach the stage of harvesting you will also have some healthy produce to add to snack times, lunch times and cooking activities.

Here are some other fun ideas on how to encourage healthy attitudes towards food:

- look at all the different colours of fruit and vegetables – talk about how eating lots of different colours is good for you.
- run some taste tests which fruit and vegetables do the children like best?
- have fun making beautifully presented healthy snacks such as fruit kebabs – use fruit from the local market as well as fruit you have grown.



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