

Designing with Schools

Bella D'Arcy

Bella D'Arcy has been working on school gardens for ten years. She is a qualified teacher as well as being an Accredited Advisor registered with Learning through Landscapes and a Member of the Society of Garden Designers

You are welcome to contact Bella D'Arcy on any of the points raised or for free advice on belladarcy@gardensandpeople.co.uk.

Please mark your e-mail 'schools' in the subject line

The schools I have worked with have been mainly primary schools, and this is reflected in this article. However for work with secondary school pupils please see *Design within GCSE Art* and *Working with Young People* which will be uploaded during December 2009



*Infant and Nursery School in Essex
Before.....*

.....After



Some schools will only want advice on planting up an area or on starting a school garden, but others will want a fully designed quiet garden. It is this kind of project which can involve the children in thinking, planning and in extending their creativity as well as in learning about plants and gardening. During my ten years as a community garden designer, I have worked with many schools, involving the staff and the children in the

whole process of design and garden-making. Previously, I had been involved with community arts and working with artists in schools, so simply adapted the practise followed by artists working with children. My approach to the children and young people with whom I worked changed according to age and social conditions within the school e.g vocabulary, and references within their experience. Generally, though, the format stayed the same.

The first meeting at the school should be with the person who has made contact - a teacher, the headteacher, Chair of Governors. In a primary school, if the contact is not the headteacher and the headteacher is not present, the project might not be fully realised. This is simply a matter of support – both moral and financial. It is the headteacher who supports the staff and allows them time to take part in what will be a long project, and the headteacher who will find the funding. (In Secondary schools, this is not so vital as the department running the project has those responsibilities, and it is the head of department who will take on the support role). It is important that the funds are there to complete the project; it is not fair to the children, who move up each year and can change schools from infant to junior or junior to secondary, not to see completed the garden they have helped to design: it is vital that these same children can plant it. In one case I was cajoled into working with the children and supported by the head of governors throughout, but did not meet the headteacher until after the design part of the project was completed. I had a wonderful time, with over 100 designs, but the money had not been raised beforehand for the construction – and, in spite of the excellent design work that came out of it, the garden itself was not built. This meant that expectations were raised that were not met.

1, FIRST MEETING

1a. FUNDING

This first meeting at the school is a meeting to discuss the project, see the site and perhaps offer suggestions for fund-raising. This will often be a meeting of goodwill – i.e. unpaid - but it is also the time to enthuse the school staff with the designer's enthusiasm, friendliness and skills so that the school wants to find the funding. This has happened in 99% of the meetings I have had.

Funds come from various sources, The school will have a 'property maintenance' budget, and if the garden is in a site which has loose paving, is harmful to health and safety or is where a new disabled pathway is needed, and the garden can be part of the project, then funding will come from that budget. Schools can apply for extra building funds if the garden is within a refurbishment programme area, and appeals to local authorities near the end of a financial year can result in some 'unspent' money being redirected. Funds can also be sought from lottery funding if the garden is to be used by the community e.g. the residents of the care home next door, or that members of the community being involved in some way in the scheme. The designer can often qualify as an artist for arts funding, as I have been, and this likelihood is increased if another artist is involved. I like to work with other artists as this means the children can learn another skill while making a feature for the garden. The school's PTA (Parent Teacher Association) will always contribute. I have often been involved in helping the headteacher to write applications to funding bodies. The school also often knows of local charities which have given fund before, especially if the school has disabled children

It is important that the designer is able to give an accurate estimate of the costs involved as once a figure has been set, it cannot be exceeded. The designer must keep within the budget. Schools cannot have an overdraft, and they also like to have a finite figure to raise. Therefore at the meeting, the designer needs to have discussed the amount of hard landscaping, the features required, and give a good idea of the cost of plants, the cost of another artist and materials. You should also have agreed the theme for the garden so that the classroom teachers can prepare material for other lessons e.g. a term topic of Japan will surround Japanese-style garden. (This theme was suggested by the doorways from a double portakabin leading onto a platform then steps either side which, painted red, would become a Japanese bridge). This theme decision then moulds the thinking which will go into the design process with the children, and inform the second artist.

1b. OTHERS TO BE INVOLVED

It is important to involve the school caretaker right from the start, as this is the person who has to look after the garden in the holidays, and make not want the extra work. Projects where the caretaker gets really involved e.g she/he is a gardener and happy to work in the garden, or might put in a watering system to make her/his life easier, or paint the walls- all of which has happened in my projects. (In one case the gardener/caretaker came from Iran so we planted *Rosa 'Shiraz'* just for him) This acquaintance should ideally be made at the first meeting so the designer can make an ally of the caretaker, making life so much easier.

The school will often have a property manager, who will be involved in these external works, and who should have a services plan. It is good if this manager could be at the first meeting or talk with designer and headteacher very soon afterwards. She or he can also be helpful in levering funds for 'improvements' so needs to be on board. She or he will also be the person who will take up issues with suppliers or constructors afterwards, as happened once when work was skimped on the construction, work which had to be re-done. This is the property manager's job, but her/his involvement will be more positive if she/he has been involved from the beginning.

Schools have to use approved constructors, so the designer may well be working with constructors she or he does not know. It is good to make contact with them before the plan stage even if only over the telephone, as that constructor is likely to have worked on the site before and can give the designer some practical tips. In one case, the constructor had dismantled the portakabins from a site which was to be the garden and discovered pipes underneath which led nowhere so there were no surprises in the dig-out of the ground.

1c. TIMING

The children to be involved in the project should not be more than 3 classes in one year in infants, or 1 possibly 2 not more in Years 3-5. This is so that the children get the most out of the designer's time – 20 minutes with young children is not enough to get them engaged and to produce work. A morning or afternoon of 1 ½ hours with a break for infants, 2 hours with a break for junior and double class sessions for secondary pupils.

The timing of the programme is important so that children can follow the whole project through, ending with the planting, mulching and tidying up - and of course the celebration at the end. The planting is therefore April – June, bearing in mind the spring break, and half-terms. There must also be time for the construction element. If the site is within an area which children have to constantly move past, many constructors will only work in the holiday when the children are not around. However, If the site can be completely protected, then constructors may agree to work in term time; this is nice if the work is visible as the children can watch progress from a safe distance.

1d. PROGRAMMING

The following is an example of the programme that I use for primary schools:

Year: 3	Class(es):		Class Teacher(s)
	A		Ms A
	B		Mr B
Date and Time	Class	Activity	People involved
Thursday 8 th September – time tba		Designer to meet teachers involved and discuss curriculum connections within the project and what they will do around it – this is the chance to involve the teachers and enable them to put in their own ideas.	Ms A, Mr C and, ideally, the Headteacher
Thursday 15 th September 9.15 first visit to class		Designer in assembly to talk to whole school	All staff and children
10.00 – 10.45 11.10 – 12.00	Class A	Introduction and measuring	Bella Ms A and teaching assistant
12.50-1.50 2.00 – 3.00	Class B	As above	Bella Mr C and teaching assistant
One Week		Class to draw up site plan, and start working on the theme	Class teachers, assistants
		Bella to draw up site plan with photographs	
Thursday 22 nd September			
10.00 – 10.45 11.10 – 12.00 second visit to class	Class A	Bella to explain site plan, discussion, concepts, drawing pictures. Distributes base plan for children's design	Bella Ms A and teaching assistant
12.50-1.50 2.00 – 3.00	Class B	As above	Bella Mr C and teaching assistant
		THE ABOVE CLASSES CAN HAVE AN ARTIST'S WORKSHOP ON 'TURNABOUT'	
Friday 23 rd September third visit to class			
10.00 – 10.45	Class A	Plant workshop	Bella Ms A and teaching assistant
11.10 – 12.00	Class B	As above	Bella Mr C and teaching assistant

One week		Children work on their own designs;	Teachers and assistants
Thursday 9 th October Fourth visit to class			
10.00 – 10.45	Class A	Each child presents their own design	Bella and teachers, sometimes headteacher
11.10 – 12.00	Class B	Each child presents their own design	
After lunch		Meeting with headteacher	Bella and headteacher
Two weeks		Bella works on her design, 3D and technical plans	
Thursday 23 rd October fifth visit to class			
10.00 – 10.45	Class A	Bella presents her plan and shows the ideas she has taken from the children etc	Bella and teacher
11.10 – 12.00	Class B	As above	Bella and teacher
12.15 -	Staff	As above	All staff, headteacher. Other staff if available
1.00	Meeting	Plans for programme of construction	Head, Property Manger, Constructor, Caretaker
Christmas and	Spring Term	Exhibition of children's drawings, full plans and Updates on progress for parents and visitors	
April/May		Planting	
May		Celebration	

The work above can also be done in the Spring Term, with construction over the Spring holiday and planting in April/May. In some cases, the planting can take place in September if the construction is part of a larger programme with other work which makes planting in the Spring impossible.

2. DESIGN PROCESS: curriculum points marked in orange

2.a. Introduction and Measuring

The designer attends assembly to explain the project to the whole and show pictures of some of her/his designs. These can be large plans pictures held up or PowerPoint. The reason for this is to allow the whole school to know what is going on, and the classes who will be working on it to become excited about taking part.

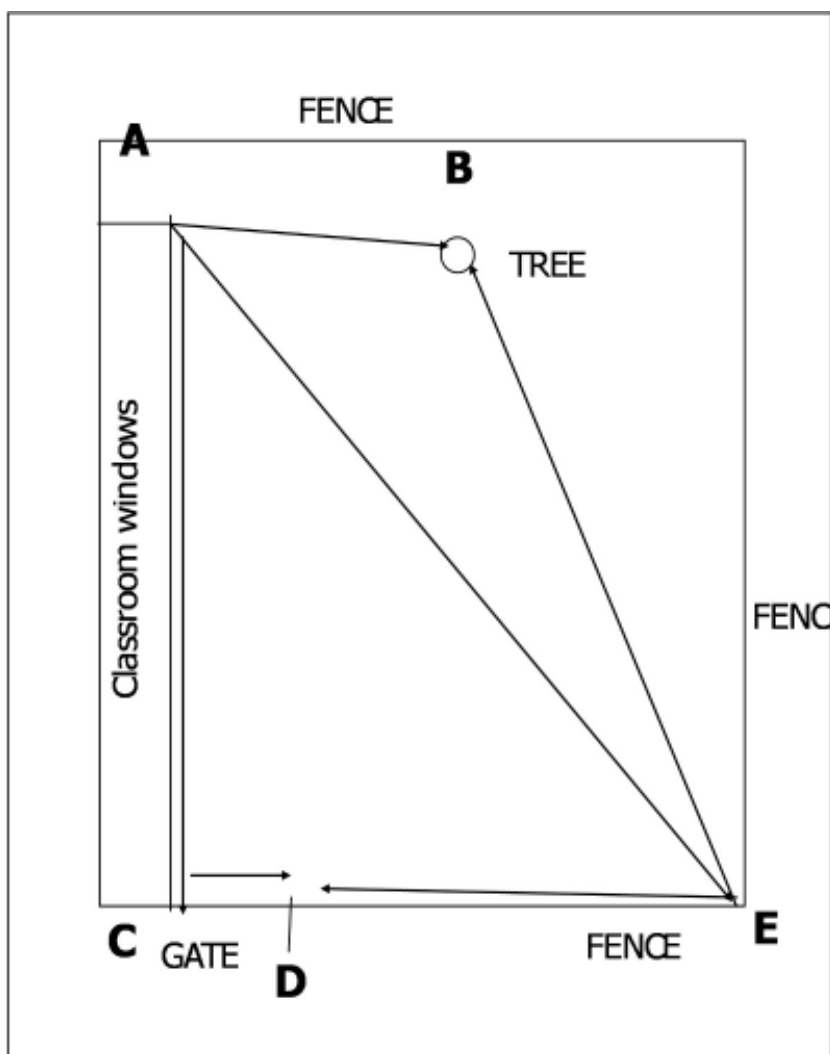
In the class, the designer asks the children if they know what a garden is, giving an idea of the children's perception of a garden. Some of the children may not even know what a garden is as they are young and live in flats. The idea for a quiet garden in the school is created here. They are not asked what they want in a garden (when I started and asked this question, a swimming pool and ice cream kiosk got requested!) but what they think they can do in a garden. The answers reading, writing, playing quiet games, talking are those wanted, but the best I ever had was 'I want to lie on the grass and look up through the branches of a tree at the sky'. In this case, although the headteacher had not wanted any grass because a small piece is time-consuming to get the mower out, we negotiated

with the caretaker to have a small patch so we could have a tree for this child to lie under. (The small tree was an amelanchier – for spring flowers and autumn colour)

The children are asked what a plan is. This is covered in the Year 2 curriculum. For the younger ones, it is to imagine looking down from a balloon on the ground, like Winnie-the-Pooh with his blue balloon, or looking at something on the floor when standing up. They are then asked to identify trees, shrubs, paving, steps etc on a plan of the designer. A key sheet with the symbols used by the designer is left with the teacher to it on the wall. This will be useful for later, with older children. For younger children it is a learning reminder. The wall is a space cleared for the work in progress on the design. The children are shown a plan of a site with measurements and observations, and told that this is what they are going to do outside.

The class is then divided into groups of or six each with a long tape measure. It is fun to show the class how long the measure is by unreeling it around them and the classroom.

Each group goes outside with the designer and a teacher or assistant. Each group has a blank plan to record the measurements



In the case of younger children the teacher/assistant holds the clipboard and plan and writes down the **maths** measurements, while the children roll out the tape measure to measure various points. The group has to observe what is already in the garden; **observation** a broken pot, weeds, a tree, a hole in the grounds; and find out where the north is and how the sun passes over the space.

If there is little time, then each group is asked to measure two measurements and identify two objects. In this way, the designer has his/her own measurements, checked many times! Photographs should be taken for documentation and the final exhibition. The designer should take his/her own photos without the children.

measuring



observing



Questions:

what might be dangerous here?

(steps)

What will we have to move out of the way?

(The shed)

What else is wrong with it? (it's dull and dirty)

recording data The class is then asked to prepare a site plan with measurements, and a list of objects identified, for the wall before the designer returns.

maths Older children, before taking the tree measurements A to B and B to E, can have the word 'triangulation' explained to them, plus other aspects of mathematics. In one project we measured a curve by measuring the distance every metre along the straight wall to the curve made by a hosepipe. In another we measured a site for a patio at 4M x 3.5 M and the children had to work out how many 450x450 slabs they would need for this.

The designer introduces the theme for the garden and says that the class will talk about it and make drawings, collect pictures during the next week. The class teacher will already

have material and the designer leaves some books for her own. (I had collected many pages from magazines over the years and would categorise these into files to lend).

2b. Second Visit to Class: site plan, **discussion** of theme, seeing the **research**

On this visit the wall is inspected and the children asked what they can remember about the site, and what needs repairing or changing. The designer then shows her/his site plan.

The question is then put 'what do you want to do in this garden' as a reminder and any work the children have done is brought out for discussion. The theme may already have been introduced during the week and work done on it. Discussion then follows about 'marrying' the theme with the 'wants'. Here it is important that designer and teacher both take part in the questioning and notes are made on the whiteboard. There follows discussion about where the paths have to go (where are the entrances to the building, where would you cross the land, are you going towards a seat?), where seating might be **science** - (sun or shade or both?), where the sun is and why it is important to know (choice of plants for sun or shade: plant placement learning) possibly why there cannot be a pool (maintenance, stagnation etc -) but there could be a slate or mosaic pool with clay ducks...

The children are then asked to do some drawings of features for the garden - on one project on the elements with a Junior class we had some lovely welsh fire-belching dragons. The children are then reminded how a plan should look, and shown the key: symbols for trees shrubs etc. Infants can be encouraged to make bigger shapes out of shaped plastic pieces and learn that putting pieces together makes other shapes. They also associate circles with pools (mosaic), planters; rectangles and squares with troughs, seats etc.



Drama class



Making a miniature garden

association of visual ideas from 3d to 2d On another project, the 'Echo Garden' children from two schools were involved in a garden for a public park. There was a drama class based on the story of Echo, the nymph who was too talkative and was forced to wander the earth repeating the end of whatever she heard. The drama

class allowed the children to be low (earth and boulders), medium (large boulders and shrubs) and high (trees). They also wandered between these objects to make twisty paths. The children then made miniature gardens in plant trays with gravel and things

transference of ideas they had collected - leaves twigs, plus plasticine to make models of the garden. From these the final designs were made.

2c. Third Visit to Class: Plant Workshop

science and shape, colour association A collection of plants is brought in by the designers and used by the children to make colour associations, learn about different textures (touch) and putting different leaf shapes together. This is a chance to explain about plants and growing conditions and different plants from different areas e.g. silver leave plants in dry areas come from Mediterranean or Mexico for example. They are asked to draw the plants. Most children draw the pots as well, but one five-year old drew an amazing picture of the plants in a Mediterranean setting for the Echo garden.

art and design In secondary schools, the plant workshop can be much longer and dwell on the shapes and colours and how these can be put together. There can also be extensive work on the kind of plants that can be chosen for the garden. In one project the garden was in an inner courtyard and discussion was had about the light conditions, the amount of maintenance required, how the plants would be part of the design, part of the garden art installation.

During the next week, the children draw up their own design and practise **communication** their presentations. The presentation can be only one sentence to say what is important about the garden, or more if the child can do this, this is for practice in explaining their ideas and in talking to a group of people about the design.



2d . Fourth visit to class: sharing designs

The designer here is the encourager; to the shy children and to the confident children. Some coaxing may be needed and the designer, the leader of the project, must take this on rather than the teacher. There may be some children for whom this is a horrendous experience and the designer needs to know when to ask the child to either present from her/his seat or make sure their design is seen later. It is rarely the case that a child will not be able to say a sentence – if very inaudible then the designer should repeat it for the class. **respect** Ensure that the class is quiet during each presentation. The designer should find something to say about each design – which is not difficult relay, for each child has something to give. Sometimes when a child has nothing to present or cannot

draw his or her ideas, then a remark like 'what did you want to see here?' is an appropriate one. Summing up at the end gives a chance to say things like 'I was thinking of that' or 'I never thought of that – that's a good idea'

The final design must reflect some of the children's ideas – which the designer will already have picked up. Discussion may well have taken place with the headteacher and constructor about the amount of hard landscaping etc in order that the designer can make sure the budget is not over run. I found that I was designing with a pencil in one hand and a calculator in the other some of the time; and redrawing the number of paving stones!

2e. Fifth visit: showing final design

The designer shows the final design to the class, explaining what she/her has taken from the children, and the staff, and, if the age range is appropriate, explains the technical plan as well. Copies of these plans go on the wall. The artist may also be at this meeting to show the final art piece or work-in-progress. Children are very interested in the cost of the project so some straight financial talk might be necessary plus where the funds are coming from.

Following this comes the practical steps towards the construction.

3. Working with Another Artist

If the artist is not known to the designer, which may happen if the project is the result of separate interviews, then pre-meetings are essential to look at each others work and talk about the project. This situation is more likely in a local authority project, mostly the school will ask for suggestions.

Ideally the first artist workshop with the children should take place at the same time as those of the designer, i.e. class changeover at midday. This means that the designer and artist have lunchtime to talk about the work in the staffroom with the teachers, and can keep track of each others ideas. After the second visit, artist and designer will have decided what the artist is to make, and these workshops can take place at any time up to construction. The artwork must obviously be weatherproof, and is likely to be ceramic, mosaic, wood or stone sculpture.



Model-making in artist's workshop

Group planting



participation and learning new skills Working with an artist give the children new skills and new perspectives. In one project with a group of teenagers who had difficulty in mainstream classes. An artist was asked to make a stone sculpture so that they could use tools in a constructive way. This appealed greatly and each young man made a piece of the sculpture – and each drew a design as well.

4. Planting with the children

gardening skills : (and health and safety)

The school will have circulated parents to ask for volunteer help (with tools) on planting day, the help is combined with supervision, ie. One adult to 2 children in each session. Planting day arrives, hopefully not wet. I have not had a planting day that was wet, now I think if it, cold perhaps but not wet. There was also a project where the local authority officer wanted the children to wear gloves, but could not afford 60+ - latex gloves are only available in adult sizes and the result was that the children could not work in them. They were abandoned in favour of wipes and getting the teachers to make sure that all hands were washed as soon as the children got back to school.

For infants and young juniors, the number in each planting group depends upon the size of the site to be planted and the number of adults, and the number of spades. The designer demonstrates how to dig a hole, how to take the pot off the plant, tease out the roots, put it in the hole, and firm the soil around it. Care must be taken by the adults to ensure that the hole is deep enough for the soil level to match the level of the top of the pot compost. Each plant must be watered.

In all my projects I have never had a child which does not want to do this – even the children who were not interested in the design like to do this – mud-play of course! In one project, for a public garden made with a junior school, and helped by the local authority gardeners, 64 children planted 1000 plants in one day!



5. Celebration.

This is very important for the school, both in sharing the garden experience with the rest of the school and for publicity. In all projects with school arranged by local authorities, the Mayor will be invited to cut the ribbon. In school it will be most likely the Head of Governors. The press photographers can often ask for children to be draped over sculptures – take care of the sculptures and be polite to the photographers you might need them (the photographers not the sculptures) later

NOTES TO DESIGNERS –

On design: It is important in the design that fire exits are considered. If the garden is next to the building then a free exit might lead into and out of the garden to an assembly point, so there should be a clear and fast path for this. One path must be wide enough for wheelchairs to go through the whole garden, with a place to park, and the use of wheelbarrows in a large garden must be considered. Beds should allow children to weed and re-plant from the path. In planting, I always leave room for the planting of annuals each year – nasturtiums are good for infants as the seeds are big to push into the soil, grow quickly and are colourful – they are edible, and if the caterpillars on the cabbage butterfly eat them, well the caterpillars and the butterflies can be studied.

On fees: work out exactly what your fee will be, I use so much per day. This means the visits to the school after the pre-meeting so you might wish to add a pound or two to cover that cost and the celebration. The reason for not putting the pre-meeting separately is that funders will not pay for anything which takes place before the project, and you do not want to be out of pocket. Do not forget to agree expenses and VAT if you are registered; VAT is something which schools can claim back so will not come out of the budget. It is no good asking for extra for yourself unless it is additional and separate work to this contract. Schools work to a tight budget, and their auditors are very shrewd.

NOTES TO SCHOOLS –

The cost of a garden, 25M x 25M, with 1/3rd landscaping, and 1/3rd planting, can be anything from £6000 - £12000 depending on materials, and construction costs. This is after the designer's fee. Of course you can have a garden for less, but do remember that the designer, while quite resourceful about designing to cost, can be constrained too much and not give the return on the finished product that you expect. The fees of the artists and designers are up to them, but most local authorities who run artists in schools schemes will tell you the artist will be £300-£400 per day plus materials and travel – and I have worked within that cost as well.

*Bella D'Arcy's designs for schools are under **School Design Profiles***