

# Grand designs

Co-operative Childcare has introduced science gardens – through a creative process involving all 50 of its settings. *Meredith Jones Russell* reports

**T**he Co-operative Childcare group introduced science gardens to its nurseries with a competition asking each of its 50 settings to design and create their own outdoor learning zones.

The competition was inspired by the location of the group's annual managers' conference, which took place at Birmingham science museum Thinktank. The museum's own science garden was launched in 2012 and was the first project of its type in the country.

Divisional manager at Co-operative Childcare Sarah Rotundo-Fergusson says the Thinktank garden provided the group with the perfect springboard for the project. 'We run a lot of these kinds of projects and competitions across the group, and the response has always been phenomenal. We found the garden at Thinktank very inspirational, and we were keen to make the staff and children part of developing their own gardens.'

The challenges of teaching science in the early years were also a motivation for the group to set up the competition. 'We wanted to really encourage practitioners to get involved with science,' Ms Rotundo-Fergusson explains. 'I think it's an area of the Early Years Foundation Stage (EYFS) they are not always confident with, which might be linked to bad memories of school days with scary science teachers. We wanted to encourage them not to shy away from it.'

All 50 nurseries took part in the competition and the entries were judged by Thinktank's head scientist Dr Kenny Webster.

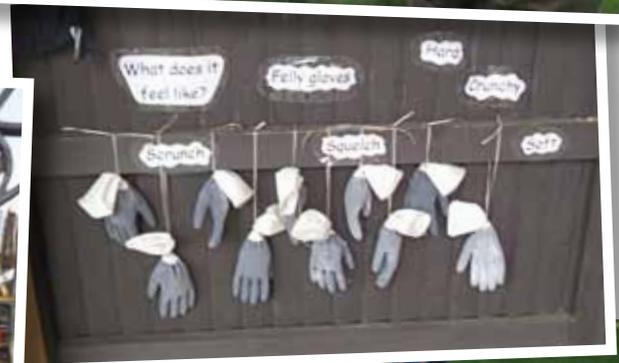


Ms Rotundo-Fergusson believes the element of competition and ceremony helped to motivate the staff. 'I think it felt very special to have someone external come in and judge the competition, to get some local news coverage of the openings of the gardens and to have the possibility of winning the prize of a night out for the whole staff team,' she says. 'Receiving that level of recognition was very important for them.'

## FLOWING LEARNING EXPERIENCE

The winning entry came from the Co-operative's Southampton nursery, which produced a sustainable design using recycled everyday items to create a host of activities for the children, including bamboo water pumps and a bug mansion.

Judge Dr Webster says, 'We really liked the winning entry and felt that the nursery was trying to engage the children with the garden. We also felt



**Co-operative Childcare's science gardens make use of ideas offered by the staff and children at its settings**



that there was a very clear structure to the different zones of the garden that had been thought out, creating a more flowing learning experience, and we just wanted to be in this garden ourselves.'

The garden drew on The Co-operative Childcare's Little Pioneers characters, which represent values children are encouraged to explore, including openness and equality. The use in signs and pictures around the garden of Ebo – a character representing social responsibility – carrying out recycling tasks, was designed to reinforce the importance of using locally and ethically sourced materials.

Ms Rotundo-Fergusson says, 'The nursery linked everything it did in the garden to our group's core values. Using the character of Ebo tied everything together, and makes it a little bit magical for the children.'

The project has given all 50 of The Co-operative's nursery settings a new approach to science teaching that has already paid off, she adds.

'It has definitely helped to overcome and break down the fear of science for everyone; practitioners, parents and children. It's great to know that all the nurseries have these resources now, and what they have done with the gardens has already really evolved into their everyday practice.'

The project will continue to influence the group's approach in the future, Ms Rotundo-Fergusson says. 'This is something that will definitely stay with us and last. The nurseries all went down different routes, with some taking a heavily nature-based approach with lots of creepy crawlies, and some focusing more on weights

and measures. So we have lots to show. We are pulling together all that creativity from the different nurseries to make a guide on how to create your own science garden with lots of photos. We can then share those ideas across the group as well as with other providers at our networking events.'

### CASE STUDY: SOUTHAMPTON NURSERY, COMPETITION WINNER

When the Southampton nursery designed its science garden, one of the main priorities for nursery manager Linda Hopkins was to make sure the children were invested in it from the beginning.

'The children were really involved with the process,' she says. 'We had a consultation with them to see what they wanted, talking about what they liked to play with inside. That helped us to develop ideas like habitats for minibeasts and a sensory area with herbs to smell. We worked on as much of the garden as we could during nursery hours, involving the children wherever possible. We made our big table together, with the children using Allen keys.'

Ms Hopkins says the competition allowed staff to think more about science teaching. 'We already did a lot of things in the garden, especially to target boys, but we wouldn't normally have chosen it as an area for scientific learning. Children all have a natural curiosity for science, but it's about getting good, quality learning from it, and the garden encourages them to experiment – for example by asking "If you pour water this way, which way will it come down?" There really are untold opportunities to make theories and test them out.'

Southampton's garden, which is sectioned off from the rest of the nursery garden by bamboo sticks, also features a ball run and a water pump with bamboo guttering to support a trajectory schema.

The nursery used a small budget to source the bamboo and some items of furniture from catalogues. The other materials came from local scrap stores and the surrounding environment.

Ms Hopkins says the competition provided motivation for the staff. 'There was a real buzz to it, and to win was amazing. It has definitely inspired the staff. They can plan all their activities for the garden and they're constantly thinking of new things.'

Since the competition, the nursery has further developed its outdoor

## SCIENCE GARDENS AND THE EYFS

The Specific area of the EYFS that relates to science is Understanding the World, which covers three main areas:

- People and Communities
- The World
- Technology.

The World encourages children to investigate and discover what different places are like, focusing on the natural and built environment. This can include their home, their local area and places they have visited. This area of learning should help children to understand things that occur in these environments, such as animals, plants, trees and ponds, as well as processes, such as ice melting and why we feel hot in warm weather.

As a result of exploring The World, children should also begin to understand environmental changes

due to the weather, climate, people, vegetation and animals.

The early learning goal for this aspect is: 'Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.'

- See Lena Engel's 'All about...UW: People and Communities' (16 June; got to [www.nurseryworld.co.uk](http://www.nurseryworld.co.uk) to view the article). 'All about...UW: The World' will be published on 28 July. Nursery World's best practice science series is at [www.nurseryworld.co.uk/science-in-early-years](http://www.nurseryworld.co.uk/science-in-early-years)



space to include a new music area with recycled materials.

'It's been really successful in the way it has grown,' Ms Hopkins says. 'Everyone has really jumped on board, because it is making the outdoor area so much more exciting. That includes the parents too, who have donated old pots and pans and wooden spoons to the music area.'

She adds that the children's contribution to the garden has continued beyond the competition, with the nursery asking them to bring in interesting items they have found outside at weekends to maintain and develop the garden's discovery table.

'If I see a nice fir cone when I'm driving around I'll stop the car and get out and pick it up, and the children will do the same when they're walking around outside. It's all about keeping your eyes open in the local environment, and encouraging the children to do that too.' ■

