



Welly-walks

for science learning

CAROL FRADLEY DESCRIBES HOW A REGULAR WALK IN THE WIND OR THE RAIN CAN HELP DEVELOP SCIENCE KNOWLEDGE AND SKILLS

I began my 'welly-walks' last autumn term, after having read an article in an education magazine over the summer that captured my interest. I wanted to include the outside environment more within my teaching. Previously, I had been involved in making several

small gardens for key stage 1 and reception class children (age 4-7), as well as a large garden with key stage 2 children (7-11 year-olds), which I ran as a gardening club after school. The gardens were used for growing herbs and vegetables, which the children planted and harvested and took to

our kitchen to be prepared for lunch. This was part of a 'Growing, cooking, eating' project to encourage children to eat vegetables.

My new idea was to take the children for a weekly walk. This was partly because I wanted the children to be better prepared for going outside; many arrived in cars without coats, seemingly thinking that they wouldn't be expected to go outside if it was wet or cold. This seemed ridiculous when we have such a great outside area and three 'playtimes' to use it in. I didn't start with any great curriculum plans; I simply sent a letter to the parents after our first walk – see Figure 1.

'Welly-walkers' investigate how the wind blows (left)

How the wind blows

I will describe one 'welly-walk' and link it to National Curriculum for England requirements (see Box 1) so that you can see how easy it is. I was quite concerned at the start that I could justify this experience so I made sure we recorded our walks (1) in case an Ofsted inspector appeared! I had just acquired a smart-board and a digital camera, and my assistant Mrs Plenty takes great pictures, as do the children. I soon found that every week there was a good reason to go for a walk. Much of the science curriculum could be approached by simply going outside; most walks we went on started with a question to answer. If you read the National Curriculum for key stage 1 science enquiry and imagine you are going for a walk, it all seems to fall into place.

I began by saying, 'Today we are going on a welly-walk to find out about the wind. How can we find out which part of the playground is the windiest?' (2). By this time the children had seen my collection of windmills and were ready to go out and use them. We donned our coats and wellies and took the camera. As soon as we were outside the children observed that when they stood facing certain directions the windmills went round. I reminded them of our question and they suggested we should go to particular parts of the school grounds. They suggested areas they thought were the most windy from their experiences at playtimes (3).

We tried out various areas. The children noticed that wind is not constant and sometimes their windmills slowed down, stopped or went really fast. They discussed with each other which direction the wind was blowing in and how it changed direction. I asked if we needed wind to make our

windmills move and they ran down the slope to show me that they could push the windmills through the air and make them go round. We obtained our evidence; they followed safety instructions and explored using their senses. We also found the most sheltered part of the playground, which was thought to be very useful on a cold day. Throughout this, Mrs Plenty took photographs and we returned to the classroom. While the children had their fruit snacks and milk, I downloaded the photographs and projected them on the smart-board. We talked about our photographs. Had we answered our question? Was the windiest place where we had thought? Actually, it was! The children then wrote a short report in their welly-walk books and

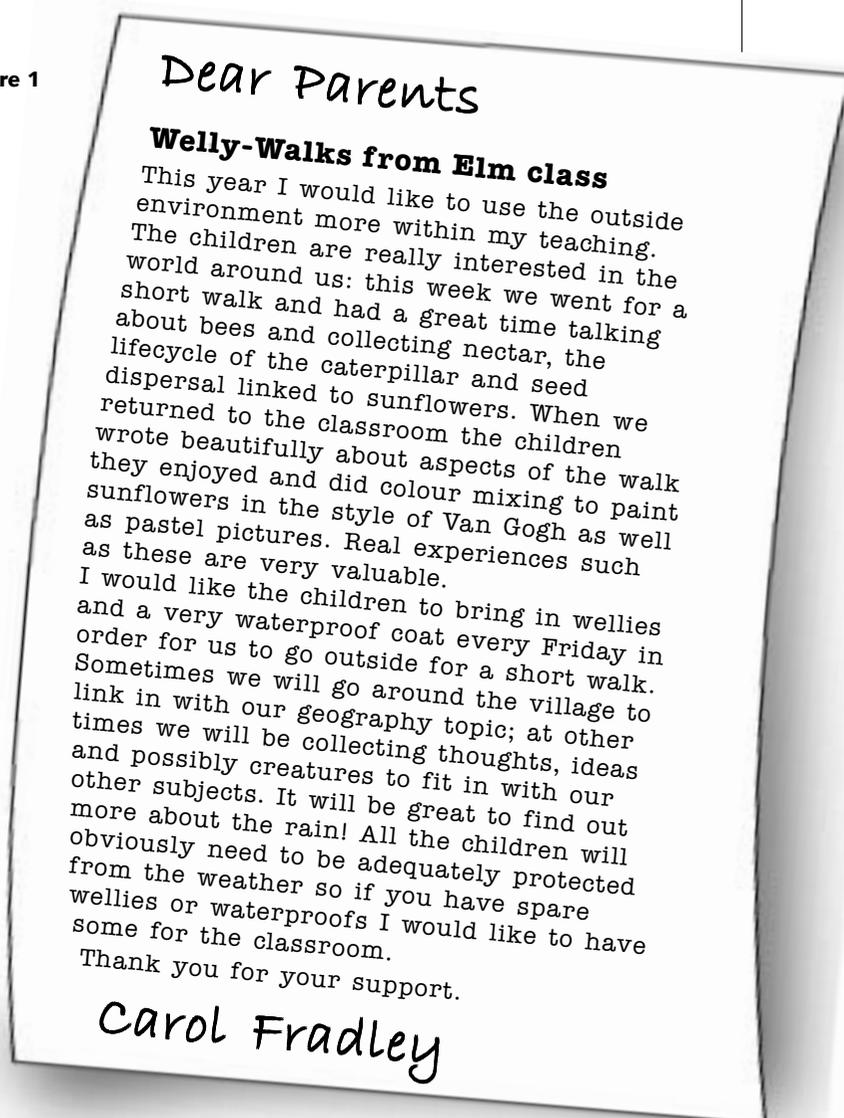
illustrated it, while I printed out our favourite photograph to go on our welly-walk board (4).

Evaluation

The best part of welly-walks is that everybody enjoys them, especially adults. The children love them, participate fully and willingly and write a few notes to say what they have seen and done. I have taught science, geography, art, history, maths (we have a big number square and number line outside), religious education, personal, social and health education, physical education and of course literacy in this way throughout the past year and I've encouraged other members of the key stage 1 team to join me or have their own welly-walks.

This year I shall be taking the reception class out as well: all

Figure 1



Box 1 Links to KS1 National Curriculum for England requirements

(1) Sc1 Scientific enquiry: pupils should be taught that it is important to collect evidence by making observations and measurements when trying to answer a question.

(2) Sc4 Physical processes – Forces and motion: (a) To find out about, and describe the movement of, familiar things. (b) That both pushes and pulls are examples of forces. (c) To recognise that when things speed up, slow down or change direction, there is a cause.

(3) Sc1 Investigative skills – planning: (a) Ask questions and decide how they might find answers to them. (b) Use first-hand experience and simple information sources to answer questions. (c) Think about what might happen before deciding what to do. (d) Recognise when a test or comparison is fair.

(4) Sc1: (g) Communicates what happened in a variety of ways. (i) Compare what happened with what they expected to happen etc. (j) Review their work and explain what they did to others.

know that every week a relevant area of the curriculum will be covered by a welly-walk. Ideally, I like to have one adult to four children, but sometimes it is one to six. With 22 children in my class, myself and Mrs Plenty would be sufficient around the

school site, but off-site I ask for parent helpers (all vetted). For example, to take all the foundation and key stage 1 children for a day out in Stourhead Gardens, that is 55 4–7 year-olds, we will have at least 14 adults, three of whom will be

class teachers. Around the school and village, there will be 35 children with a 1:4 adult-child ratio.

My school has a fantastic environment. We have access to the village where we often visit different people working; we see sheep being sheared, new lambs, chickens, pigs or just collect conkers. I have started to plan some activities on using the senses but I also know that people will contact me at school to say things like, 'on your welly-walk, you should come and see ...'

I can't wait!

Reference

DfEE (1999) *The National Curriculum handbook for primary teachers, key stages 1 and 2*. London: DfEE/QCA.

Carol Fradley is the year 1 teacher and science leader at Upton Noble Church of England V.C. Primary School in Somerset.



Water Scorpion as seen by **HI-TECH WILD-TREK**



Discover the biodiversity on your doorstep

with **HI-TECH WILD-TREK**

A mobile field ecology lab using computer and video technology to make monsters out of mini-beasts.

An excellent way to explore your school grounds or nearby habitat, recording the results with video and digitised pictures.

Full planning in advance to meet curriculum objectives - **all Key Stages**.

Activities led by an experienced teacher.



- ◆ All fieldwork equipment supplied
- ◆ Magnifications up to x400
- ◆ Investigative approach
- ◆ Many cross-curricular links
- ◆ 10th year on the road

CONTACT

richard@wildlifeeducation.co.uk

Phone 07785 230449

OR VISIT

www.5kingdoms.co.uk

