



WWF SCHOOLS' CASE STUDIES SERIES

Working towards Education for Sustainable Development

### Real world motivation – making a difference

Are you interested in helping your students become more motivated and higher achievers?

This case study looks at how you can get young people engaged by tackling an issue through firsthand, real life experience. Read on and you will discover how an initially science-based project extended to a wider spectrum of subject areas; how this provided a more cohesive and effective context for teaching and learning, for both teachers and students; and how the school, the local community and their respective environments benefited. The outcomes highlighted on page 11 make the link with those listed in the introductory booklet to these case studies –

**"Working towards Education for Sustainable Development".**

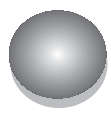
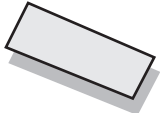
# Fighting to Breathe – an environmental campaign

This is the story of something that came together as a result of a number of coincidences. It involves an average second year group of 13-14 year olds working through their 5-14 Environmental Studies (see 'Background' on page 12) science course and myself, their teacher. Here is a group of young urban teenagers who are generally hard to motivate and whose attitudes often reflect their background and their experience of living in a large built up area. They have very little interest in the wider environment, let alone issues relating to sustainable development.

"Isn't the environment about the countryside? What's that got to do with me, I live in the city?"

"All this Environmental Studies stuff is boring..."

"We can't do anything, nobody listens to young people. Adults don't like young people asking them to do things."



As teachers we try to make the science units as relevant to students as possible in the hope that something might spark their imagination and provide motivation for participating and learning. In our school a unit on air pollution is thus followed by one on 'acids and alkalis', including an investigation of acid rain as an environmental issue. The students go into the field and measure pollution levels, and we talk about the consequences of car exhaust fumes in our local area. In this way, they build up some personal experience and practical skills relating to air pollution in the local area.

Around the time we were studying these units, I was encouraged by information about the Bright Sparks Award Scheme (see 'Background' on page 12) and an associated professional development day to follow up an idea found in the briefing materials - a website with information on organising a 'Car Free Day'. This proved to be a catalyst for the project that is the theme of this case study.

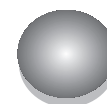


The M8 passes through the northern part of the school's catchment

"It was... a significant moment when, having discussed the possibility of running a campaign to encourage the school and the local community to support a 'Car Free Day', the students decided they should do it."



Paisley Road West traffic outside Lourdes Secondary



The self-esteem of the students, both as individuals and as a group, was generally low. There was a feeling that they could not bring about change themselves; nobody would listen to them. It was, therefore, a significant moment when, having discussed the possibility of running a campaign to encourage the school and the local community to support a 'Car Free Day', the students decided they should do it. In addition, they were interested in monitoring the success of their campaign. These young people were motivated, they wanted to make a difference – and know it.

**National Car Free Day (organised nationally by the Environmental Transport Association) was on the 16th June, 1998. The students' decision to promote it was made around the beginning of May so there were just 6 weeks to campaign.**

### How to approach the campaign?

The students take up the story...

"Time was short, so we needed to agree a plan of action, with everyone contributing. It was agreed that we would:

- carry out a questionnaire to obtain an idea of how extensive car use was as a means of getting to and from school
- promote Car Free Day using posters in the school and local shops, and a banner on Paisley Road West
- carry out two traffic counts on Paisley Road West and Berryknowes Road - exactly one week before Car Free Day and again (same time) on Car Free Day
- survey school staff and students to determine the impact of the campaign on them."

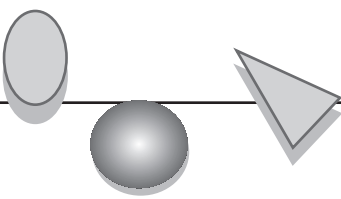
"We decided to use the questionnaire survey with the first year students (S1,12-13 year olds) - the year group most likely to be brought to school by car, and the staff, many of whom travel to school by car."

"We wanted to attract wider attention to our campaign locally, so we decided to hang a banner up outside the school, and to write to bus companies, local primary schools, local councillors, local businesses and the press. This involved a lot of letter writing."

"A budget of around £100 was made available from the school's Superbowl fund. (Superbowl is a Greater Glasgow based, Council run, schools environmental competition, held annually.) This involved us managing a budget and making decisions on how to spend it. We considered buying a banner, but it was so expensive that we decided to make our own. We used the money instead to buy T-shirts with the Car Free Day logo on them. They could then be used again in the future."

"As the timescale was quite short, the plan underwent very little modification."

"In all the planning and decision-making, we referred to our teacher for guidance and support, and she steered us at times, but mostly we were in control."



## Could we make a difference?

This was the main question that we hoped to answer.

We worked in teams with responsibility for different parts of the project. Some parts were so large that everyone was involved. For each task we got ourselves organised.

### The questionnaire:

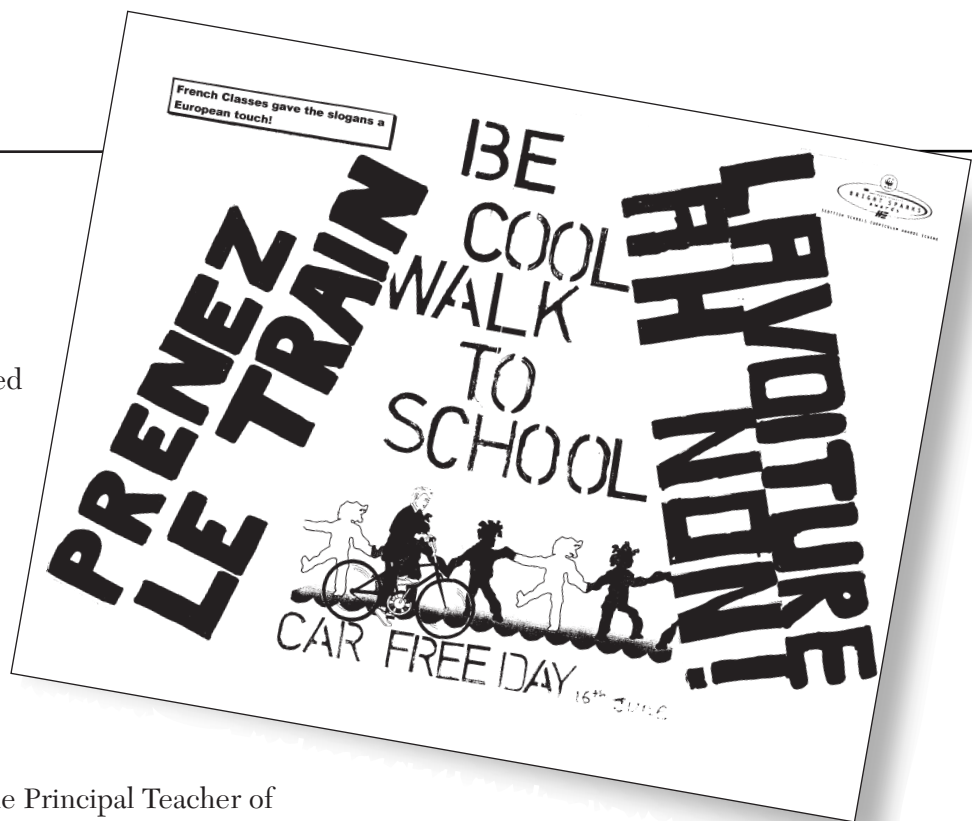
Initially, we had a group working with the Principal Teacher of Geography making up the questionnaire. Over 200 questionnaires were handed out and collected back in. They were then analysed and our conclusions drawn from the results. Those planning to study Standard Grade (equivalent to GCSE) Geography opted for this task.

### Posters and banner:

The poster group started working on individual posters. They soon realised how long this would take so they produced a few basic designs which were photocopied, and asked people to add slogans. The Art Department gave us advice for our banner and two people worked with one of the Art teachers to transfer the Car Free Day logo onto the banner. "Be cool – walk to school" and "Don't fuss – take the bus" were two examples of the variety of slogans we came up with.

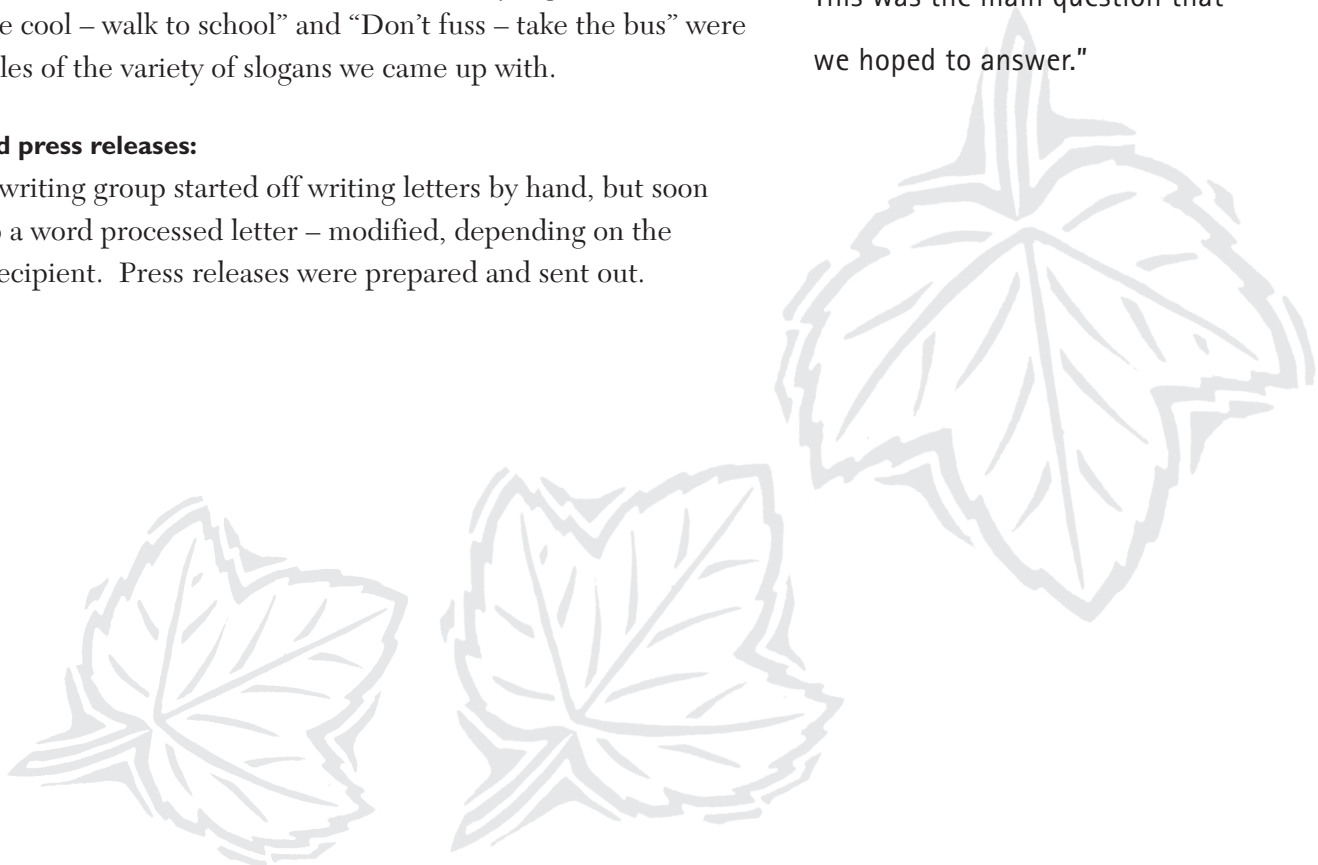
### Letters and press releases:

The letter writing group started off writing letters by hand, but soon resorted to a word processed letter – modified, depending on the intended recipient. Press releases were prepared and sent out.



"Be cool – walk to school" – one of the poster designs. European touch courtesy of the French classes!

" Could we make a difference?  
This was the main question that we hoped to answer."





Some of 'the team' with our banner hanging on the school railings – carrying its message

Some of 'the team' at work designing the banner



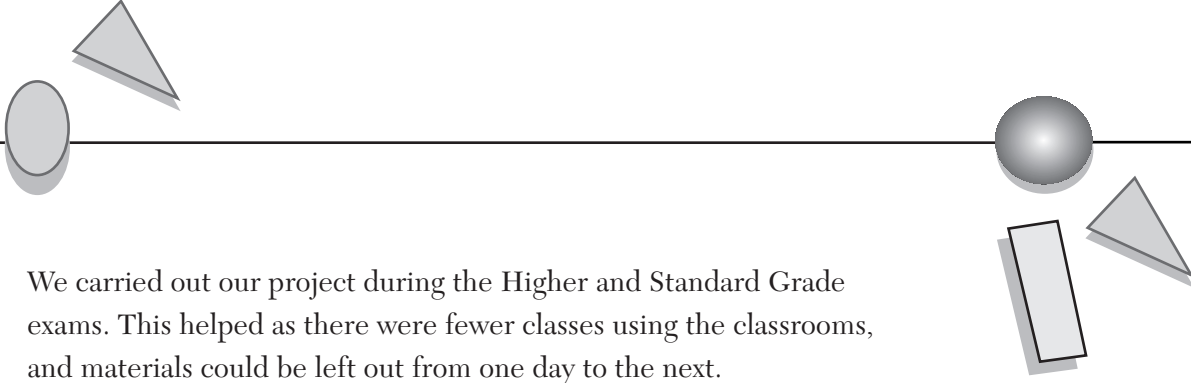
“For some of us it was only when the project got going and there was a chance we might get our photos taken by the media, or be on TV, that we got motivated. For others, we really got worked up about the issue, and were prepared to discuss the challenges with people in the class, corridor, anywhere – trying to persuade people to take some action. Either way, we were involved and doing something.”

### Challenges and solutions in secondary schools

From the teacher's perspective, the main challenges for such a project were time, inflexibility of the timetable, and space – not unusual! An extra period of Science in the S2 timetable provided more time overall, enabling the project to go ahead. However, this time was rationed to a 50 minute block, resulting in our work being done in bursts. This was less efficient than if we had been able to concentrate on one area for a longer period – a morning, say. The tasks most effected by this were:

- making the banner – it kept being taken out and put away, and
- analysing the surveys – we kept losing track of what had been done.

This meant we had to have several recounts, although using the computer helped a little.



We carried out our project during the Higher and Standard Grade exams. This helped as there were fewer classes using the classrooms, and materials could be left out from one day to the next.

## What about the outcomes?

### ...in the school

What made this project matter?

*It brought together students and staff* in tackling a local environmental issue that had relevance to our lives and mattered to us – we called the campaign ‘Fighting to Breathe’.

The students had the opportunity to take responsibility for their own learning through an issue that mattered to us all; and to manage, deliver and evaluate an environmental campaign – for real. Teachers noticed that deadlines were met and progress made when the students were in charge and were allowed to do things their way. The more the students were involved in the decision-making, the more was done.

As teachers, we had the opportunity to work with students closely in a ‘real world situation’. In addition, it was a less formal opportunity to see how well the students tackled the tasks required and approached specific, science-based, assessable tasks, such as the different methods of collecting and analysing data.

*There was a real sense of community* about the school – as more and more people became involved and interested in the campaign. The article in the *Evening Times* helped by giving the campaign a degree of credibility with the other students.

“I didn’t understand pie charts until I did this.” *John B*

“When I have a car I’ll think before I use it.” *Laura*

“The really disappointing thing wasn’t the bigger number of cars on the road. It was that hardly any of the teachers did without their cars!” *Sharon*

“There’s cycle lanes and cheap day returns on the bus now – did we give them the ideas?”

*Alexis*



*Other students were motivated by it* – Geography students in S3 (14-15 years) to S6 (17-18 years) took some of the data collected and developed it for an entry into an Association for Geographical Information competition. Their entry earned a Highly Commended award. The campaign also featured as part of the school's entry in the Superbowl competition. The school took first place in this competition – the first time that we have won it.

**...in the wider community**

Outside the school others in the local community made the connection. The local business community acknowledged and supported us by writing back. One offered prizes for those who made the effort to do without their car on Car Free Day. The local Councillor was also very supportive.

**...on the day**

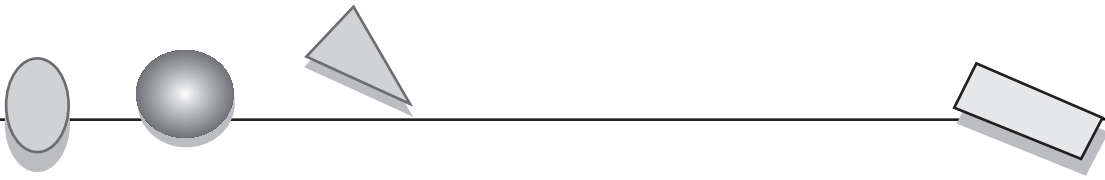
What happened on Car Free Day? Would you believe it! When completed, the survey count showed that there was more traffic on the road on Car Free Day than there had been at the same time the week before. There was a significant increase in the number of cars! Did this mean our campaign had been a failure?

"I learned about pie charts in this project, and I also learned that a lot of people need their cars, and people don't like young people asking them to do things about it. I sort of liked this project... overall it was good." *John A*

There's something for us all to think about in these comments about teaching and learning.

**Carrying out our survey...**





What a disappointment! But let's look again more critically at the evidence and influencing factors... Later in the day we realised the real reason for the increase in cars. The original planning for the survey had carefully chosen to avoid rush hour traffic. What we had not recognised was the other significant event being held on June 16th, 1998 – Scotland playing in the World Cup! As a consequence, a lot of local people were leaving work early to get home in time to see the game: their going home time coincided with our monitoring time.

Had we realised earlier in our planning, we might have chosen a different day for our own 'local' car free day. This might have shown a difference in our favour. As it is, we have no way of assessing the true impact of our campaign on people using cars locally, and it may also explain why we didn't get much media coverage.

**How did we do – did we make a difference?**

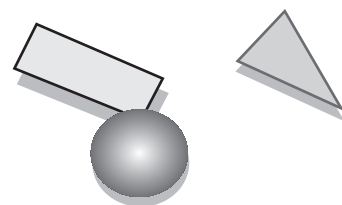
The answer is 'yes'. In school, since the campaign, more staff have experimented with alternative methods of getting to work. There has also been a group set up in school to investigate the possibility of more students being encouraged to cycle to school.

"What we had not recognised was the other significant event being held on June 16th, 1998 – Scotland playing in the World Cup."

"The campaign certainly made a difference in school and beyond – it was the students' effort that made it matter to others, and is now leading to people changing their habits from using their cars all the time. In this way they have contributed to achieving cleaner air to breathe and a healthier future in their local area." *Linda Cracknell, WWF-Scotland*



Some of the team receiving our Bright Sparks cheque from Howie Watkins

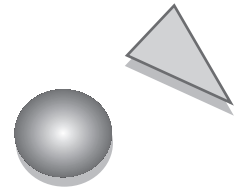




## Sharing our experiences

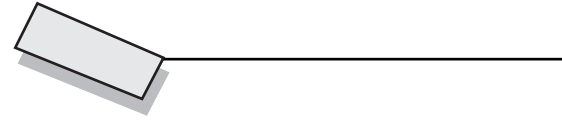
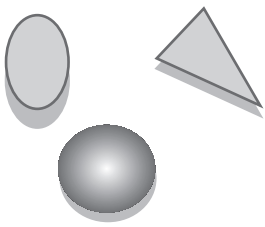
There is a general feeling that the basic methodology behind the project could be of use in many areas of teaching Environmental Studies. The benefits to the students involved in running and evaluating the success of their own campaign were so great that the need to tell other groups (school and community) about the work became the next potential challenge to be undertaken.

This case study is providing one means of disseminating the project and its outcomes. Ideas for further dissemination have been discussed with the Science Advisor for Glasgow, the Principal teacher of Geography and Senior Management at Lourdes Secondary. As a consequence, as part of the WWF Live Wires programme (see 'Background' on page 12), we have started to produce material for a CD ROM which will reach a wide teacher audience, be flexible in its use and which can be referred to when needed. This is being achieved with the help of a colleague, interested students and other local Primary schools.



"When involved in the project, I found that pupils were motivated and that everyone wanted to be involved and to contribute. Some of the best contributions came from those usually acting as 'troublemakers' in the class. I don't remember having any discipline problems while the project was running. Things also went better when the pupils made the decisions. In the future, I will give the pupils more control and more time to organise and publicise things properly."

*Pauline McAdam, Science teacher*



## Links with Developing Informed Attitudes and Education for Sustainable Development

The links between the project and education for sustainable development go beyond the starting point of an environmental investigation based on scientific method. The project made our young students aware of the complexity of addressing environmental problems, encouraging sustainable solutions and affecting people's lifestyle.

It addressed not only the environmental problem and its related science, but also economic and social factors: the current demands for higher standards of living; the importance of self and status in society; and the difficulty in getting people to question accepted ways of thinking and doing. The project was a powerful vehicle for helping young people address what matters to them, and in doing so, to develop informed attitudes and confidence in themselves.

This 'real world', project-based approach motivated most of the students because it addressed issues that mattered to them. As such, it provided effective and meaningful learning, as well as influencing people's choices (theirs and others) for a better future.

Those who care, realise that the chances of persuading people to give up their cars altogether are pretty low. However, we can hope to persuade people to think twice before using their cars for short journeys, and to consider alternatives to the car. By doing this we can reduce the number of cars on the road and improve the quality of the air that we breathe. The Lourdes students and teachers believe that it was worth trying to do something positive for our local area. This was our commitment to a healthier and more sustainable future. We did it – we made a difference.

"The project made our young students aware of the complexity of addressing environmental problems, encouraging sustainable solutions and affecting people's lifestyle."

"The project was a powerful vehicle for helping young people address what matters to them, and in doing so, to develop informed attitudes and confidence in themselves."



## **What's this got to do with Education for Sustainable Development?**

Some important learning outcomes achieved and built on throughout the project:

### **Knowledge and understanding**

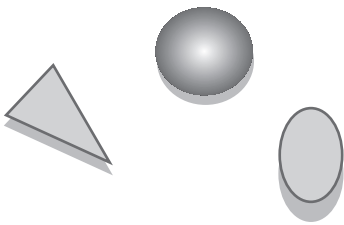
- how natural processes work and are interconnected
- the global problem of 'acid rain' and its impact on the health of people and nature, particularly plants
- how the processes of decision-making work and how to take part
- different people's opinions of what is important to them; impact of economic and social pressures and traditions
- that young people can make informed decisions and make a difference.

### **Skills**

- co-operation and working together
- problem solving
- informed decision-making
- creativity and an ability to see a changed way of doing things
- information handling – collection, presentation and interpretation of data.

### **Values and attitudes**

- a desire to participate in improving people's environment
- a commitment to the health and well-being of all living things – people and plants
- an understanding that 'quality of life' is not equivalent to 'standard of living'
- a sense of achievement from being involved in changing things for the better – as a 'good citizen'
- a belief that, working with others, young people can make a difference
- a sense of identity and self-esteem
- valuing and respecting others' points of view
- a belief in a better future.



### Further information

For copies of this and other Bright Sparks case studies, or for information on current initiatives for Scottish schools, please contact: WWF Scotland, 8 The Square, Aberfeldy, Perthshire PH15 2DD.

For information on the full range of titles within the WWF Schools Case Studies series, please contact: WWF-UK, Panda House, Weyside Park, Godalming, Surrey GU7 1XR.

### Valuable resources

**Friends of the Earth Scotland** *Monitor the Air You Breathe – A step-by-step guide*. A briefing providing useful background and instructions on how to use the special tube supplied to indicate NO<sub>2</sub> concentrations in the atmosphere. More tubes available from FoE Scotland. For more information, contact FoE Scotland at 72 Newhaven Road, Edinburgh EH6 5QG or phone 0131 554 9977.

**Environmental Transport Association** The website that provided the stimulus for the project – please go to [www.eta.co.uk](http://www.eta.co.uk)

### Acknowledgements

Case study written by Lynnette Borradaile, based on a report written by Pauline McAdam (Science) at Lourdes Secondary School, Glasgow. Published by WWF-UK on behalf of WWF Scotland.

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Registered charity no. 201707



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## The School and its project

Lourdes Secondary is a large (about 1,600 pupils) Catholic comprehensive school in the south west of Glasgow. It is bordered on one side by Paisley Road West which is a main traffic link between Glasgow and Paisley. Both the M77 and M8 motorways pass through the school's catchment area, and raise pupil awareness of the impact of traffic and roads on their everyday lives.

With this plethora of busy roads passing through the area, an environmental project relating to traffic and its effect on air quality is very relevant. The key to the success of this project was that the focus of a campaign appealed to the students. This was what motivated them – along with the fact that they had a chance to make a difference. There are other environmental and social issues that young people care about, and these can be a 'live' means of engaging their interest, creativity and energy in a way that other class-based investigations never can.

This case study aims to share some insights into how a single department, in a large, urban secondary school, has taken up the challenge of ESD – providing the real world relevance behind Environmental Studies; how we have already succeeded in involving and influencing other departments in school, and how we hope to stimulate others elsewhere to take these or other ideas forward.

*For further information on this project, contact: Pauline McAdam, Lourdes Secondary School, 47 Cardonald Avenue, Glasgow G52 3DF.*

## Background

This case study arose from Live Wires, an extension of the Bright Sparks Award Scheme, during its final year of operation. Live Wires provided funding and support to enable participating schools to disseminate their ideas more widely in the local area and beyond.

The Bright Sparks Award Scheme – managed by WWF-Scotland and sponsored by Scottish Hydro-Electric between 1996 and 2000 – focused on the 5–14 Environmental Studies national guidelines (for those outwith Scotland, this is the curriculum context for teaching Science, Social Subjects and Technology) which provide an opportunity for integrating the principles of Education for Sustainable Development. In particular, the scheme aimed to stimulate good policy and practice demonstrating ways to integrate the 'Developing Informed Attitudes' strand within the guidelines. This is one way in which WWF helps develop ideas for new teaching and learning approaches – equipping students for thinking about and acting in ways supporting the goals of sustainable development.