



WWF SCHOOLS' CASE STUDIES SERIES

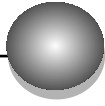
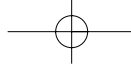
Working towards Education for Sustainable Development

# Education for Sustainable Development in Special Schools

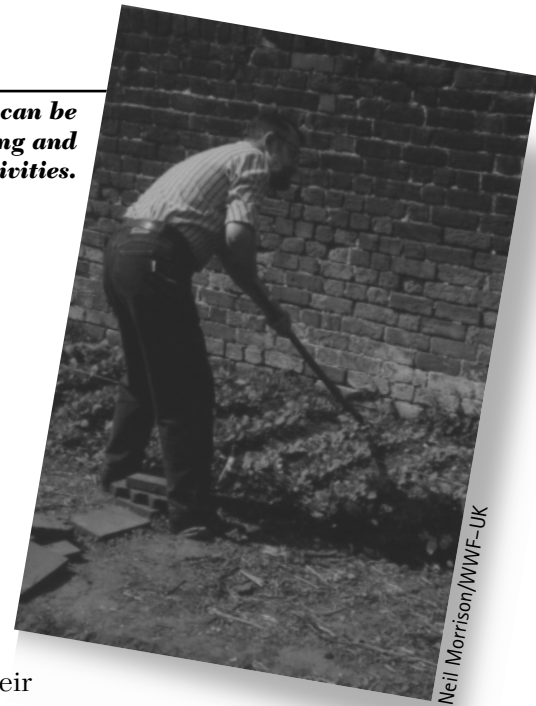
**“Our fundamental goal is to support learning which facilitates and enables the development of young people, empowering them to take their rightful place in society, valued for the contributions they are able to make – contributions that will lead to benefits both for themselves and the wider community. Our aim is to negate the limits that the students’ special needs and the preconceptions of society place upon them, encourage them to raise their expectations and celebrate the very real impact they can make to a positive future for all.”**

***IMPACT Schools Consortium***

**“Through our ESD work, we are recognising that special needs students tend to receive skills training rather than training in thinking. We have now proved to ourselves that, given motivation, the students can have their thinking skills developed. They have responded to being part of a team and helping others, which gives them a sense of being valued and because of this, they have taken on responsibilities.” *Teacher, Mayfield Centre***



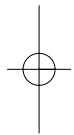
***School grounds can be used for gardening and leisure activities.***



When a consortium of special schools decided to take part in WWF's Curriculum Management Award Scheme 1995-97, it was because staff felt their goal of enabling students to become as independent as possible, through developing the knowledge and necessary skills to sustain a purposeful place in the world now and in the future, paralleled the aims of Education for Sustainable Development (ESD). Although this goal has not changed, the schools did not realise the fundamental shift in practice that would result from full engagement with ESD.

The project began with an INSET day in which Special Education teachers reviewed the kind of environmental education being taught in their own establishments and explored issues of sustainability in a wider context. The consortium developed a set of aims which enabled them to draw together a number of previously unconnected elements within the existing curriculum and provided a clear focus and coherent framework.

Subsequently, the three schools involved developed their projects in different ways, but worked as a 'critical friend' network, sharing ideas and challenging each other's thinking, which staff felt was crucial to the development of the project.



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

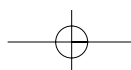


**Skills**

- co-operative working
- critical thinking
- negotiation
- problem solving
- informed decision-making
- creativity – an ability to envision alternatives
- research and data handling.

**Knowledge and understanding**

- how natural processes work
- how the processes of decision making work and how to take part in them
- how pupils' own lives and actions connect with the lives and actions of others – locally, nationally and globally
- what is involved in different methods of providing for human needs and wants (raw materials, energy, human input, environmental impact)
- ability to make future decisions about their lifestyles in a positive and effective manner.



## WWF SCHOOLS' CASE STUDIES SERIES

Working towards Education for Sustainable Development

### Values and attitudes

- a sense of identity and self-esteem
- empathy and awareness of the points of view of others
- taking responsibility for their own actions
- a desire for active participation
- a belief that, working with others, they can make a difference
- a belief in a positive future.

### ESD principles provide a framework for developing a garden – Mayfair House

Mayfair House is a 16+ unit catering for students with moderate and severe learning difficulties. Staff wished to make better use of the school garden for horticultural and leisure activities. ESD gave a framework to this project, exploring cultural, social and economic factors.

#### Introduction

Discussions with the students about what could be done with the garden revealed both a diverse and limited understanding of what a 'garden' was. An investigation was carried out by photographing and drawing the Mayfair garden and the students' gardens at home, to establish a common concept. This information was shared among the students.

We noticed that students who would approach staff to request or relate information had difficulties doing this with their peers, as if they devalued the ideas and contributions they were able to make. Previously we had not fully comprehended this but, as we encouraged student discussion in planning the garden, we began to see attitudes changing.

One example of this was two students who got together at one of their homes to cut and paste pictures of plants they had selected from gardening catalogues. Admittedly, these were more able students, but there was a definite shift in attitude among the students in the classroom. The more able students began to sit (independently of staff intervention) with the less able, and ask "What do you think?" and "What colour would you like your pond?"

"Without the framework and direction offered by the concept of ESD, the work we undertook in the garden at Mayfair would have been completely different. Creating the nature pond and the recycling facilities; getting quotes before making financial decisions; growing on cuttings rather than buying new plants every time; involving the local secondary school; using the grounds for social events involving the broader community, and planning for the special needs of others – all this was the result of our involvement in the project."

*Teacher*



**Community gardens – the school grounds can provide a venue for events involving the broader community.**

Initially unrealistic 'dream garden' designs with football pitches and zoos led to visits to outdoor spaces, including Southampton Football Ground and a nature reserve. The students began to understand limitations of space, and drew up a shortlist of things they would like that would realistically fit into the garden.

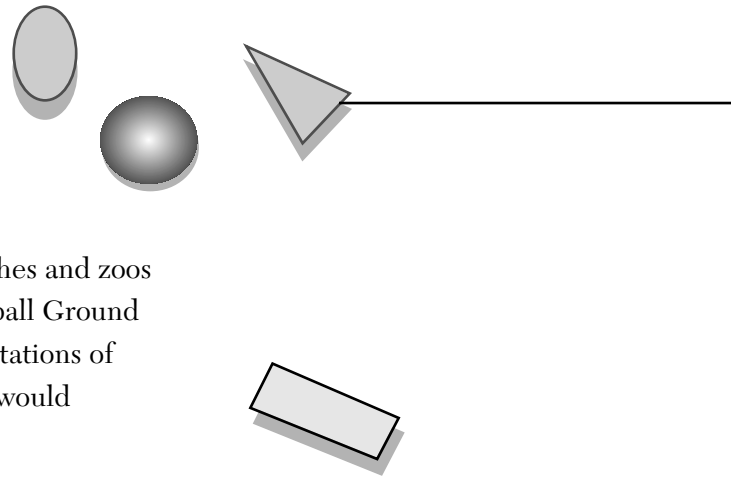
### Exploring cultural factors

The students were next required to think about the people who might use the garden. By its very nature, Severe Learning Difficulties education concentrates on the individual needs of the students: the downside of this approach is that they can come to view themselves as the centre of their existence and be unaware of other people's needs. However, by considering the 'end user', the project encouraged students to look beyond themselves and consider the people around them.

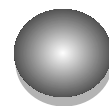
The students chose to design the garden for the pupils at Ridgeway House, Mayfair's parent school for under 16s with severe learning difficulties. They invited classes to visit Mayfair, entertaining them with refreshments and games in the garden. In this way they came to realise that not all the pupils were fully ambulant; that some preferred to sit rather than play games, and others looked for shade or enjoyed looking at and touching the plants. One student asked if she could do a work experience placement in the nursery at the main school. This was arranged and she was encouraged to talk to the other students about her work there and what the nursery children were like.

The students made a list of all the disabilities that they found, including sight and hearing impairment as well as the more obvious need of pupils in wheelchairs. They began to talk about individual pupils and it became apparent that each had chosen a different pupil to centre their ideas upon. In discussions with the others, they talked about what they thought were the needs of these particular children.

Some of the students had difficulty in realising the limitations caused by different disabilities, so we tried out some exercises to explore these effects. To gain some understanding of the needs of wheelchair users, the students tried gardening whilst sitting in a chair. They considered what it would be like to be blind by wearing a blindfold, or deaf by putting fingers in their ears. These activities engendered a remarkable amount of speech, with comments like, "I can feel the floor" (blindfolded), "Can't!" (planting from a chair) and "Everything – birds, cars ..." (blindfolded).



***Considering the 'end user' can help students to look beyond themselves.***



## WWF SCHOOLS' CASE STUDIES SERIES

Working towards Education for Sustainable Development

Coming to understand how they could meet these pupils' needs was a problem solving exercise. Often the students solved the problem without realising it and this had to be pointed out to them: for example, students sitting in a chair and trying to plant a hanging basket placed on the floor, simply put the basket on their lap and planted it. Other students automatically helped each other when blindfolded, saying "Step!" and holding their arm. When we discussed why they had to help the person in the blindfold, the students were able to realise for themselves that this was mainly because of obstacles such as steps. These exercises led to design ideas such as raised beds and flat paths without steps.

### Exploring social factors

The students were asked to consider for what purposes the garden could be used and how they could encourage people to visit. Staff could immediately identify a variety of uses, but the work needed to be student led, so we created opportunities and experiences to encourage them to have their own ideas.

Games were their first priority: they chose a wide variety and it was important to consider which ones could realistically be catered for in the garden. From our visits and from watching sports on television, the students knew that many sports required a large space. Our students regularly play basketball at a local college and, as we did not have space for a hard court, they analysed the game and voted for the part that they enjoyed most, which was scoring baskets. We decided to fix a basket net to the wall, and then had to find out where to buy one and what it would cost. The students visited several sports shops and then one bright spark suggested ARGOS. From the information they gathered and the pictures in the ARGOS catalogue, the students were able to make an informed choice.

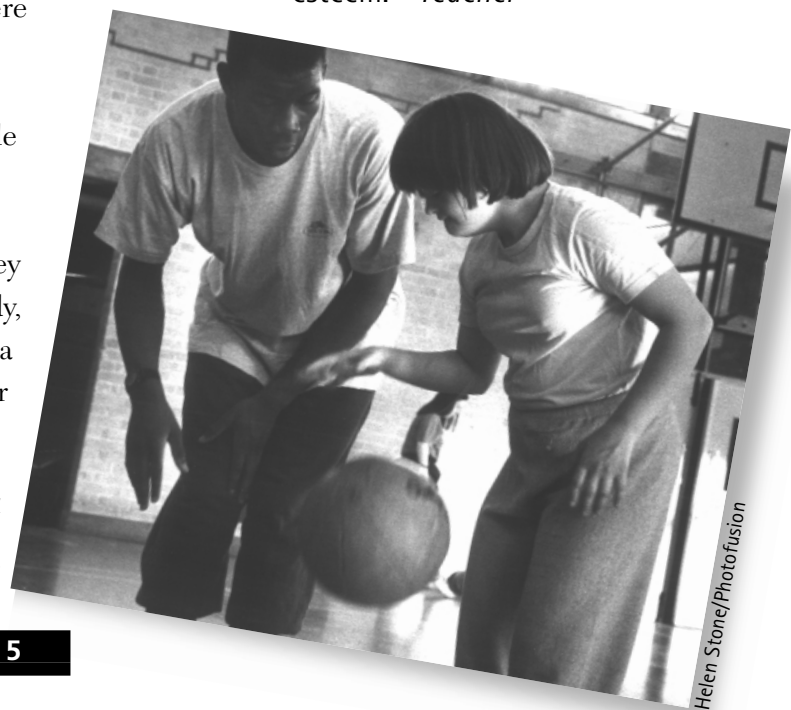
We have entertained the parents, governors and people from college links once every term and the students suggested having a Garden Party in the summer term. We talked about the things we would need. At first they thought only of tables and chairs, which we had already, so we moved on to food. One of the students recalled a picture of a barbecue and, without prompting, another found the ARGOS catalogue to look for barbecues.

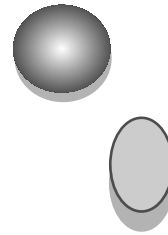
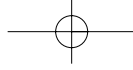
***Our students wanted to fix a basketball net to the wall – but where to buy one? From information gathered, the students could make an informed choice.***

"The students surprised us with their innovative ideas. We considered making raised beds from brick squares filled with soil, but on a visit to the garden centre one student spotted some huge half barrels and suggested we use them

instead, *'They look much nicer.'*

Considering the needs of others had the added benefit of distracting students from their own needs and in some cases inadequacies, and the realisation that they could actually have a positive impact on someone else's life provided a tremendous boost to their confidence and self esteem." *Teacher*





The students conducted a wildlife survey of the garden and were disappointed to find there was very little, so we encouraged them to think of ways to attract more wildlife. From our photographs of people's gardens the students pointed out bird tables and feeders. We asked what else the birds might need, but this seemed impossible to answer, until we asked the same question at lunch time and two students immediately said "Water". It was then just a short step to the idea of a pond, an item that had featured in all their 'dream gardens'.

We visited a city farm, and saw wild habitats and plants that encourage different insects. The students were particularly interested in butterflies, so we visited a butterfly farm in the New Forest. They began to make a list of plants that would encourage butterflies and actively searched for them at garden centres. We set up an old aquarium in the house to study the various small forms of life that we encountered in the garden. The students were very excited by this, and particularly liked to watch the snails glide across the glass. One student became so interested in the city farm that he requested work experience there. He now goes every week and intends to continue when he leaves Mayfair at the end of the year.

We wanted to provide a resource for the whole community, so we talked about who else could benefit from the garden we were creating. One student, who was integrating into art classes at the local secondary school, suggested that the pupils there might like to visit. As a result, the pond was offered as a resource for the school's Science Department.

Many of the students who leave Mayfair won't be able to take up full time employment in the way that society understands it. However this project has given many of them a real interest in horticulture, which they can use to augment their leisure time or pursue through a college course.

As the project developed we noticed that the students increasingly learnt how to organise themselves into work teams and appeared much more comfortable in expressing their ideas and opinions. One of the best aspects for me has been to see students looking at each others' work and making positive comments. At a practical level they have begun to do jobs around the house without being asked and increasingly involve others in the process. For example, one student waters the hanging baskets, organises someone to hold the door open for him as he carries the jugs of water, and asks another student to bring him a chair to stand on.

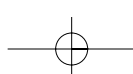
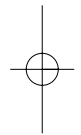
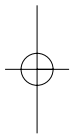
"The independent use of resources and independent investigation by the students has been one of the primary benefits of the project.

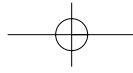
Definite progress has been made in their acquisition of initiative." *Teacher*

"This project has helped to forge stronger links between our two establishments, created greater opportunities for integration and helped to promote a positive image of our students.

They can see their work is valued by others and this has given a tremendous boost to their confidence. The relationship between our students and the secondary school pupils has also improved: their pupils will stop in the street, shout 'hello' and ask after individual students."

*Teacher*





## WWF SCHOOLS' CASE STUDIES SERIES

Working towards Education for Sustainable Development



Helen Stone/Photofusion

***It's important that improvements such as school grounds development are 'owned' and led by the students.***

Mayfair House has a strong self advocacy policy and we set up a student charter and council while working on the garden project. We were determined that the grounds development should be owned and led by the students as the project was an excellent way of putting the self advocacy policy into action, and for the students to realise the implications of creating a student charter.

The opportunities for choice, debate and decision making fully involved the students in the operation and workings of the student council.

### Exploring economic factors

As the students planned barbecues, pergolas, basketball nets and nature ponds the subject of cost had to be addressed. The city council were offering funds for environmental improvement projects, which seemed too good an opportunity to miss, and a great way for the students to become financially involved in the project. From the very beginning, the students were required to find out the cost of every item they wanted in the garden: an excellent exercise for the more able students. As they began to realise that the same item could cost different amounts in different places, they were able to discuss cheap and expensive options and look at quality. The students pooled their information and, with much support from staff, spent two weeks putting it into the computer. This was a very valuable experience for them as they saw their written and pictorial work being compiled in a report to be sent to the council.

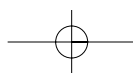
We were more than pleased when the council offered us just over £1000, which will cover our costs and also provide the opportunity for the students to set up a joint bank account with the staff and to manage their own funds. Without this funding the project would have been added to the school development plan to compete with all the other funding priorities. Now the students will be able to see the fruition of their work whilst they are still at Mayfair.

Instead of buying new annuals every year, the students have learnt how to take cuttings, sow seeds and then pot on the seedlings. The excess plants can be sold by students at the open afternoon in the garden, and

"The benefits are many and varied: students have been able to assert themselves in a secure environment and to realise that they are valued for their contribution, not only by their peers but also by the staff.

They have had to learn to listen to others, to take turns and speak clearly, to consider what they are saying and concentrate on one subject at a time.

Their levels of self interest and enthusiasm have motivated them to make real progress in these key areas." *Teacher*



at the main school. These mini-enterprises give students the experience of handling money in real situations and the money they collect won't disappear into some invisible pot – they will have concrete evidence of what they have earned in the things they choose to spend it on.

The students have learnt about caring for plants, looking at what they need to stay alive and healthy. They have also been able to discover a framework within which they can measure the passing of time. Having the garden has made them far more conscious of the passing seasons and the changes these bring to the weather and to the plants. They are more able to talk about 'last year' and 'next summer'. The less able can witness the passage of time as the seeds start to form and flowers appear.

**"Buying plants and seeds, pots and compost, gave the students experience in handling money. An example of this was offering the students a choice of a 10p, 50p or £1 coin. Finding out the cost of plants and where to find them in the garden centre was another learning opportunity.**

**For one autistic girl who has difficulties orientating herself around shops and has to rely on asking for help, this experience has proved invaluable. She required a symbol to prompt speech and the whole situation of approaching someone to request help was filled with tension for her. However she was highly motivated by the thought of buying a plant of her choice and choosing where to put it in the garden. As a result of this work, she is now able to ask for help without a symbol prompt, which is a major step forward for her." Teacher**

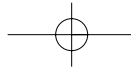
#### **ESD and the curriculum**

Our first aim was only to set up the resources for a horticultural curriculum. At that stage we had not realised the impact this would have upon all curriculum areas.

Developing a mini-enterprise around plant propagation and sale has substantially improved the students' self esteem and their contact with the wider community. It has helped engender a sense of time and continuity through a growing awareness and knowledge of plant needs in different seasons. It has developed independence and communication skills, involving use of language, literacy, numeracy, problem solving, investigation and consultation. It has presented the students with the need to communicate with outside people, opportunities for which are not often available. The students have had real ownership of the project which they feel is within their control. The project has provided learning for staff and students, learning about the world around them and about themselves.

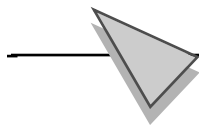






WWF SCHOOLS' CASE STUDIES SERIES

Working towards Education for Sustainable Development



**Teaching issues and concepts in a special school  
The Mayfield Centre**

**Developing conceptual understanding through practical work**

Our school was already involved in environmental education: the grounds were used to provide horticultural training and we were committed to community based education. The starting point for our project, to develop students' work skills at a local owl sanctuary, was already planned. But ESD gave the project more depth by developing the students' sense of responsibility towards the environment and an awareness of their own ability to improve it.

The planning and resultant work were student led, which improved teamwork skills: they quickly learnt to organise themselves, deriving great satisfaction from the responsibility of ownership. All the students contributed to the design of the plot, and regularly photographed 'work in progress' to help them monitor change. Over a long period of time the students gained an understanding of environmental changes and the need for maintenance. Some were inevitably crestfallen when they discovered after a holiday break that weeds had returned and were flourishing!

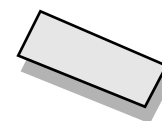
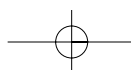
The ability to follow a work routine is a transferable skill that is useful in the adult world. Our students learnt to wear appropriate clothes for work, remembered to collect the tools for the job, and quickly reported for work on arrival. They learnt that Tuesday was Owl Sanctuary day and would set about preparing for work without prompting from staff.

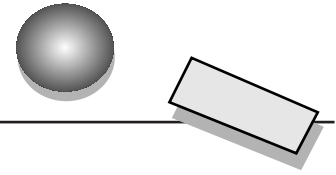
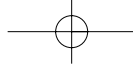
**"Increased self esteem developed earlier than anticipated, because of the student led nature of the work: actually being given responsibility for the project and the notion of 'going to work' made students feel grown-up."**

**Self esteem was further raised through the work being linked to the Youth Award Scheme, enabling students to gain national accreditation, and the press coverage of the final celebration left them positively glowing."**  
*Head of Centre*

"The philosophy of ESD was compatible with the Centre's aims, but whether students who have learning difficulties could gain from focusing on the development of concepts and ideas – as opposed to the acquisition of skills – was new territory." *ESD co-ordinator*

"Cutting back overgrowth to gain access to the plot; designing and making a path within the area; clearing prolific weeds and constructing a flower bed demonstrated clearly to our students that they could physically improve their environment. Photographs reinforced this concept as the students decided for themselves that the 'before' pictures were 'a mess' and 'after' was 'good!'"  
*Head of Centre*





Previously, I would not have contemplated trying to raise student awareness of the management of natural resources. But staff took advantage of the opportunities provided by gardening to draw attention to the life cycle and water cycle. Discussion around pictures of drought and famine reinforced the notion that resources are not limitless, and this triggered concern from one student about another global issue affecting sustainability: war.

Assessment of Mayfield's own grounds, which had fallen into neglect during work on the owl sanctuary, helped the students to understand the need for environmental management and ongoing personal responsibility. They recognised the need for time to work on their own grounds, which was duly timetabled. Mayfield garden was reorganised into individual plots to enable the students to create their own designs, and to reinforce the concept of personal responsibility.

#### **Going back to the beginning to develop understanding**

Inspired by the success of a recycling project at the Phoenix Pupil Referral Unit, and publicity about the local council's recycling schemes, Mayfield staff decided to invite New Forest District Council's Recycling Officer to run a workshop for their students. Although the information given was more than the students could absorb on a single afternoon, they were motivated by having an outside speaker, and a resource pack with follow up work consolidated and reinforced basic ideas.

The centre began to participate in the local recycling scheme, with students dutifully and effectively sorting the waste. However, at this point a monitoring exercise showed up a gap in their understanding.



Neil Morrison/WWF-UK

**A mobile recycling unit.**



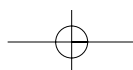
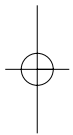
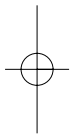
Chris Harvey/WWF-UK

"The fact that it was possible for students with learning disabilities to contemplate issues of global importance was the result of a natural progression from practical experience to the introduction of concepts – from our acceptance of their ideas and plans to their confidence in stating ideas and concerns."

*Teacher*

"If you work with students who have learning disabilities, vocabulary does not necessarily indicate understanding; beware of falling into the hole of assumed knowledge!"

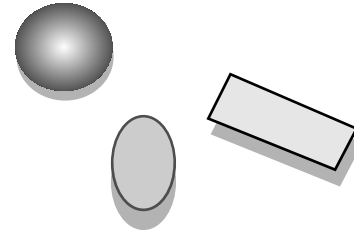
*Head of Centre*



WWF SCHOOLS' CASE STUDIES SERIES

Working towards Education for Sustainable Development

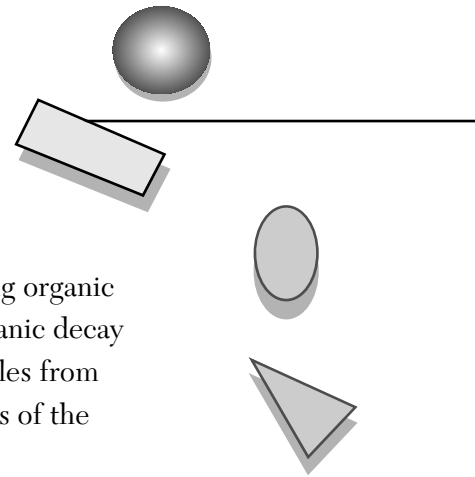
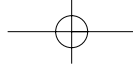
Confident that our students had grasped the principle of recycling, we had a revision exercise prior to Ofsted which demonstrated the fact that they had good sorting skills and the word 'recycle' featured in their vocabulary. However, their interpretation of recycling was to 'put it in the other bin' and they thought this exercise was basically to please the bin man. The idea that products could be reused simply had not been taken in; we had spent insufficient time on the actual process, instead focusing on participation in the routines.



To address this oversight, we took the students right back to identifying basic materials and looking at manufacture, leading to the idea of products being broken down, reprocessed and reused. We went on metal hunts with magnets; played 'I-spy the wood' and similar games for glass; looked at photographs of steel works and pictures of glass blowing. The students were fascinated and the excitement of discovery with magnets was well worth seeing. The idea of breaking things back down to raw material and reusing that material now made some sense to them. With hindsight, if I was introducing students to a recycling study now, I would start with materials and their uses, focusing on those which could be tracked through the recycling process.

**Visiting a local landfill site, the students were able to see waste disposal on a grand scale.**





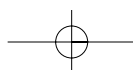
As well as recycling household waste, the students are now involved in composting organic waste from both kitchen and garden. They did some background study about organic decay and lifecycles, and collected and sited a compost bin from the local council. Articles from the local press about the council's composting scheme provided clear photographs of the process, which aided understanding.

Even with the students' involvement in good practice, we were concerned about whether they realised that what they were doing had long-term significance. We used graphs and photographs indicating the scale of waste production and disposal, to raise awareness that there is a big problem. Visiting a local landfill site, the students were able to see waste disposal on a grand scale. (This is not something I would have considered prior to my involvement in ESD and I was a little concerned at having to complete the County Council's 'hazardous pursuit form' before gaining approval for the exercise!)

The day proved a great success: the site staff received our students well and gave them a tour which was informative without being over-technical. The size of the machinery and the excavation work made a definite impact on the majority of our students – although a couple focused on the bird life (hundreds of seagulls) and misinterpreted the occasion as a visit to the seaside! The landfill site was adjacent to a recycling centre so the students were able to see the next stage in domestic recycling first hand. We had hoped to take them to a factory where they could see the completion of the recycling process but there are none geographically accessible to us (it would mean a residential field trip and consequently extra funding, which is not available at present).

I cannot pretend that all our students have gained a deep insight into environmental issues. However, some of them have reflected a concern for the wider environment in their work and in their keenness to share what they have learnt with their families and the wider community.

A concern for the environment and for others have combined to form the basis for the next stage in the project, which involves offering an environmental improvement service to local elderly people. We have liaised with Age Concern and plan to have a small team available once a week for general gardening and recycling assistance. Recycling household waste, composting and garden maintenance are now integral parts of our timetable, and the focus of developing ESD skills can be seen in all aspects of our work.



## WWF SCHOOLS' CASE STUDIES SERIES

Working towards Education for Sustainable Development

### Curriculum enrichment through links with home and the broader community Phoenix Pupil Referral Unit

The Phoenix Pupil Referral Unit is a special unit primarily for school phobics aged 11 to 16 who are unable, through emotional or psychiatric problems, to attend mainstream school. It is intended as a temporary placement while students are reintegrated into mainstream education. Previously, environmental education depended on the enthusiasm and expertise of individual staff, but the ESD framework enabled us to build on existing ideas and to broaden the scope of the curriculum; to develop pupils' understanding, skills and values and enable them to participate in a sustainable future for the planet.

#### Planning and introducing the project

We chose recycling as an appropriate topic with potential for cross-curricular work and community involvement. Our small staff team had regular monthly meetings where we set curriculum targets and wrote and implemented new curriculum models. We felt that a simple project was needed in the beginning, as many students lacked confidence in their own abilities. We hoped that if students could see that they could influence others, it would make them feel valued and thus raise their self esteem. Beginning with a study of recycling at school and in staff and students' homes, the project not only created awareness of and enthusiasm for the topic but also changed the unit's waste management policies.

"I feel that it is the enthusiasm of students to ask questions, analyse results and then make informed recommendations that is enabling this project to have a real impact."

*Teacher*



#### Computing and business studies

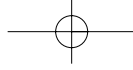
Because of our strong emphasis on building links with the wider community, we arranged for a group of eight students to visit a local electronics factory. On their first visit, they watched videos and toured the premises to develop an understanding of manufacturing processes and problems. On the second and third visits, they investigated recycling policies and then wrote reports on their findings.

The encouragement that our students received from industry was an important part of the project. We extended the topic of personal recycling practices, and the students designed a questionnaire which was sent to 350 employees at the factory. More than 200 were completed, and they were analysed in Maths classes (see below). The project work, including letter writing, investigations and report writing, will be accredited for the Vocational Access Certificate, a pre-NVQ business course.

Arrangements have now been made to visit recycling factories in three German towns and we are currently seeking funding for the trip. All the students are studying German and the visit will enable them to study the language at first hand. Afterwards, the students intend to make a presentation to local industry, suggesting ways they might improve their recycling practices in the light of German practice.

"I am very glad that companies such as yours have taken the initiative to increase the amount of waste that is recycled."

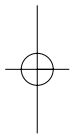
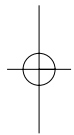
*Jenny Jones, student  
(aged 16)*



### Mathematics

The pile of returned questionnaires provided a golden opportunity for statistical work. Given the wide range of abilities in each age span and the limited concentration of many of the children, it is important to revise basic topics in small chunks to build on existing knowledge and boost their confidence. The questionnaire provided a practical focus for this.

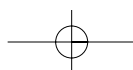
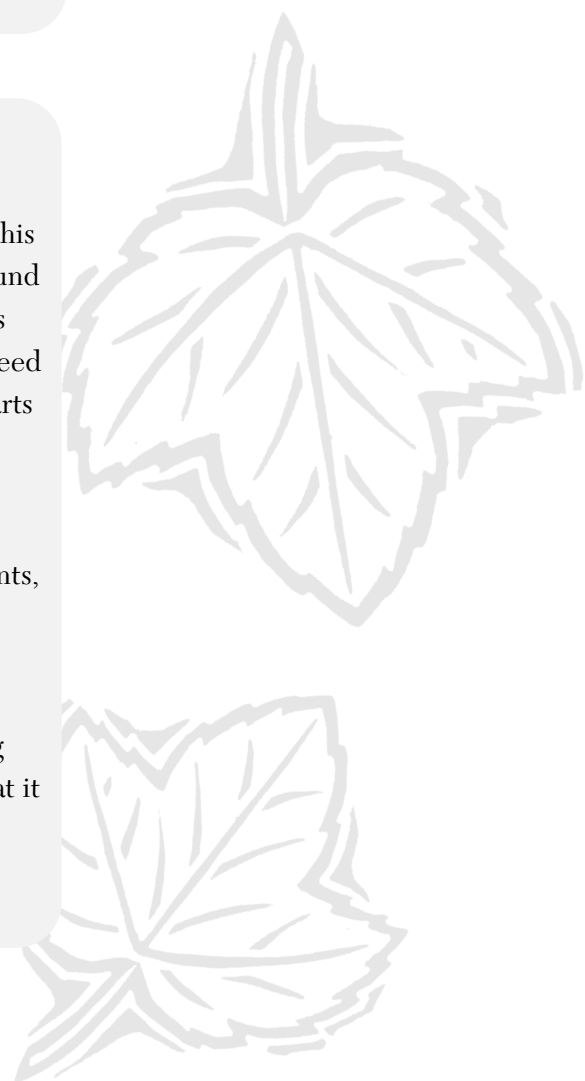
The group discussed how they could use the information they had collected. Tally charts and frequency charts were compiled and pupils suggested different ways to display the data. This gave the older ones with knowledge of bar and pie charts an opportunity to revisit the topic and to help those with no prior knowledge, providing a valuable experience socially as well as mathematically. The questionnaires were stored for future use with different students, and we plan to re-present the questionnaire in two years to find out if the commitment to recycling is increasing.

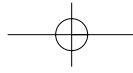


### Religious Education

The RE syllabus for Key Stage 3 (12-14 year olds) includes the theme 'Signs and Symbols'. We used this to explore sustainable values and ethics, based around 'The Glass Cupboard', a moral fable by Terry Jones which explores the fragility of the planet and the need to put something back in return for what is taken. We identified parts of the world which are under threat because this principle has not been followed. Pupils enjoyed the story and fully understood the moral implications. They produced a cartoon strip sequel, either singly or in pairs – a valuable exercise which encouraged the students, who are often very introspective, to look outside themselves and consider the needs of others.

This theme really captured their imagination and interest, sparking off lively arguments and discussion. The topic was so successful that it has been incorporated into the syllabus and we will certainly be using it again within RE and PSHE lessons at the unit.





## WWF SCHOOLS' CASE STUDIES SERIES

Working towards Education for Sustainable Development



### Geography

ESD played an important part in environmental geography in Years 9 and 10 (14-15 year olds), beginning with a study of the local area and widening this to encompass global issues.

We investigated renewable and non-renewable sources of energy and explored in detail the advantages and disadvantages of each. We discussed where energy would come from in the future and students warmed to the question 'Can we continue to put our world in danger?'

During the year we visited local facilities, including a water treatment plant, a local council rubbish tip and the New Forest. Visits to the school from Hampshire and New Forest Recycling Officers, an Energy Efficiency Officer and an Environmental Health Officer engendered lively discussions and maintained enthusiasm for the topic.

A study of Japan revealed that developing industries, while protecting Japanese forests and wildlife, can have a detrimental effect on other areas of the world (as with many industrialised countries). Discussion of the ethics of this tied in neatly with 'The Glass Cupboard' theme already explored in RE. Sustainability issues were also explored through studies of Antarctica, desert and rainforest habitats.

**"The World is fragile,  
As if made of glass.  
Easily shattered,  
So we must learn from the past.  
And protect our planet,  
Not destroy it through greed  
And hatred and envy.  
Why must it bleed  
Before we notice it's damaged  
And past repair.  
We must do something now,  
Whilst the chance is still there."**

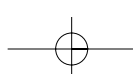
Jenny Jones, student (aged 16)

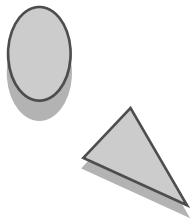


### Design Technology

Following a visit to the Countryside Education Trust at Beaulieu, two students became involved in designing and building a community composter in design technology classes.

Such was their enthusiasm for the project that part of the work was carried out in their own time. The general public are encouraged to bring garden and kitchen refuse to see for themselves how the composter works so they can duplicate it at home.





"The benefits to the students were enormous: giving them extra confidence, boosting their self esteem and allowing them to participate in a very worthwhile and sustainable project which will influence a large number of people."

*Teacher*

### Background

This case study is one of a series published by WWF-UK. Each one describes aspects of work undertaken by schools across the UK, whilst involved in WWF professional, curriculum and institutional development programmes.

In England and Wales, support was originally provided through the Curriculum Management Award Scheme, which aimed to stimulate good Education for Sustainable Development policy and practice, demonstrating ways to integrate ESD within the curriculum whilst working towards a whole school policy. This is one way in which WWF helps develop ideas for new teaching and learning approaches - equipping educators and students for thinking about and acting in ways supporting the goals of sustainable development.

For details of current curriculum development programmes, contact the Education division at the address shown opposite.



### Key factors in a special school ESD project

- Involve students in decision making from the beginning.
- Provide practical experiences through which students can gain relevant knowledge and skills.
- Where possible, provide opportunities to explore environmental, social and economic aspects of a project.
- Develop links with the outside community to increase student confidence and overcome prejudice.
- Encourage co-operative group work.
- Encourage students to consider the needs of others.
- See adult staff as facilitators, not carers.
- Establish a 'critical friend' network with other special school teachers to share ideas and evaluate progress.

### Acknowledgements

Based on reports written by IMPACT consortium members: Darryl Morgan from Mayfair House, Tina Livingstone from Mayfield Centre and Christine Richards from Phoenix Pupil Referral Unit.

Published by WWF-UK, Panda House, Weyside Park, Godalming, Surrey GU7 1XR.  
© WWF-UK, 2000.