

Hillhead High School



# A Curricular Audit on the Environment and Policy Statement

June 2007

Updated from January 2006

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## Rationale

Hillhead High School has recently joined the international Eco-schools project.

Eco schools is a project for promoting environmental awareness in a way that links to most, if not all, curricular areas. In particular, many cross-curricular issues such as citizenship, education for sustainable development, PSE, health education, social and environmental justice and the global dimension can be tackled through Eco schools.

Values and citizenship are key aspects of our National Priorities in Education, which all local authorities are developing. Achieving Eco schools status is one way of demonstrating practical involvement in promoting citizenship and environmental awareness.

As an initial step, subject departments, pastoral care and the senior management team listed all initiatives and activities undertaken as part of a whole-school audit of environmental activity.

Some examples of departmental environmental activities are listed. The list is not exhaustive but should give you an idea of what's required:

- specific curricular links to the environment
- departmental links to environmental organisations
- outside speakers
- competitions
- community involvement
- industrial visits
- cultural visits (film/theatre) with an environmental slant
- sourcing of environmentally friendly products for department
- technological activity
- departmental recycling initiatives
- use of the school grounds for learning

The pupil Eco Committee will move forward and develop the aims detailed in the Eco Code (page 4) as they strive for Green Flag status.

Hillhead High was awarded the Silver Award in January 2006 by the Eco schools Scotland committee in recognition of the steps taken to date.

Hillhead High School is applying for the prestigious Green Flag Award during the month of this policy update. The school will be assessed for this Award during September or October 2007.

## Hillhead High School Eco Code

Hillhead High School is committed to the dual ethos of sustainability and responsible global citizenship.

Accordingly the following Environmental Policy Statement has been adopted:

- Hillhead High School will encourage good environmental practice among its staff and pupils
- Hillhead High School will seek to ensure that suppliers and external contractors to the school apply the same level of commitment and concern to environmental matters
- Hillhead High School will endeavour to ensure that the management of its estate is in a manner which accords with environmental good practice
- Hillhead High School will pursue a 'good neighbour' policy in relation to its immediate surroundings
- Hillhead High School will utilise its' staff expertise to provide a curriculum that offers the pupils of the school a high quality education in environmental matters at all levels
- Hillhead High School will use its knowledge base to help promote Scotland's environmental well being, by interacting positively with the local community, industry, commerce and with the wider national and international communities, to address environmental issues.
- Hillhead High School will participate in the international Foundation for Environmental Education (FEE) Eco-Schools programme, and will participate fully in the programme on the eight target areas of litter, waste, energy, water, transport, health, biodiversity and the school grounds.
- Hillhead High School will have an Eco schools committee populated by pupils and interested staff to move forward the aims of the programme within the school.

## Art & Design

Year Group	Topic	Activity
S1	Ansel Adams Photographs of the landscape	Painting composition – based on the theme of the natural environment.
S5 – S6	Interior Design Project	Design a space for senior pupils to use located in the terrace building.

## Biology

Year Group	Topic	Activity
S1 – S3	M.T.A. Group	Tidy up Terrace gardens, planting of new plants and planting of a bulb bed.
S1 – S3	M.T.A. Group	Entered Superbowl and gained a silver Award.
S1 – S3	M.T.A. Group	Links with Sarah Swan (presentation) at Wiseman Group to establish and raise awareness of recycling.
S1 – S3	M.T.A. Group	Developed a paper recycling program.
S1 – S3	M.T.A. Group	Sarah Swan provided workshop to demonstrate ‘Recycling of Paper’. Pupils involved in competition run by the Wiseman Group.
S1 – S3	Terrace Gardens	Used money from Friends of the West End to enhance the gardens.
S1 – S3	Care of plants	Pupils care for plants in biology rooms.
S3	World of Plants	Yearly visit with standard grade pupils to the Botanic Gardens specifically linking to curricular issues (uses of plants).
S3	Biosphere	Use of school grounds with standard grade pupils to measure aspects of the ecosystem: Quadrat, Light and Moisture, Bark rubbings, etc.
S4	Growing Plants	Intermediate 1 pupils learn about plants and how to propagate. They use different propagation techniques.

## Chemistry

Year Group	Topic	Activity
S3 – S4	Haber Process	Raising awareness of the links between chemistry and the chemical industry.
S3 – S4	Fuels	Developing knowledge about finite resources, the environmental issues caused by fuels and how to reduce the impact.
S3 – S4	Hydrocarbons	Raising awareness of the importance of the petrochemical industry in wealth creation and the impact on our lives
S3 – S4	Metals	Raising awareness of metals as a finite resource and developing the importance of recycling.
S3 – S4	Carbohydrates	Raising awareness of the importance of renewable fuels in the future.
S5 – S6	The Chemical Industry	Develop an appreciation of the value of the industry to local and national economies and the pace of technological change within plants.
S5 – S6	Nuclear Chemistry	Acquire an awareness to take part in decisions that will affect their well being and that of others.
S5 – S6	Feedstocks and Fuels	Broaden awareness of the issues surrounding feedstocks and fuels.
S5 – S6	Polymers	Raise awareness of recent developments in the production of new polymers and their uses.

## EAL

The EAL department has no formal curricular links to the environment, but they contribute substantially to the eco-ethos of other departments in the school.

## English

Year Group	Topic	Activity
	Texts	Texts which deal with environmental issues which include: Stig of the Dump, Throwaways, Adam's Ark, The Hones, Zigger Zagger.
S3 – S4	Close Reading	Many Standard Grade papers have an environmental slant.
	Projects	Library projects on issues of concern.
	Writing and Talks	Argumentative essays – pupils often choose environmental issues such as depletion of the rainforests, keep cities clean etc. Some 5-14 National Test material in this area.
Staff	Departmental good practice	Purchase of recycled stationery and goods (where possible).

## Geography

Year Group	Topic	Activity
S1	Glasgow and the Clyde	Different types of settlement, how rivers shape our landscape and influence our lives, changes in Glasgow, how life in Glasgow compares to life in Dhaka, Bangladesh.
	Weather and Climate	Our weather and how it affects the way we live, Britain's climate, tropical storms and how they affect us.
	North America	Physical landscape: People coming to North America The River Colorado and the hot desert environment.
	Fieldwork	Stirling – physical landscape study New Lanark – river study green energy sources, conservation, river walk.
S2	Volcanoes and earthquakes	Structure of the earth, plate tectonics, earthquakes. Volcano study – Mount St. Helens Earthquake study - Kobe
	Climate and ecosystems	Factors affecting climate, climate around the world, ecosystems – hot desert, tropical rainforest and tundra.
	Cold lands (tundra)	Locations, climate features, landscapes, traditional lifestyle in northern Canada/Alaska, development of mineral resources and conservation issues.
S3 – S4	The physical environment	Physical landscapes (glacial, rivers) are the product of natural processes and are always changing.
		The physical environment offers a range of possibilities for, and limitations on, human activities.
		There are many competing demands for the use of rural landscapes.
		The physical environment is a resource that has to be used with care and its management is a global issue.
		The elements of weather can be identified, observed, recorded and classified.
		The world can be divided into major climatic zones.
S3 – S4	The human environment	Urban settlements have many common characteristics relating to site, situation and function. Farming systems provide food supplies and raw materials.
		Economic change has social and environmental consequences.
S3 – S4	International issues	International relations are dominated by a limited number of countries acting in conjunction with others.
		Regions of the world are linked through trade.
		Schemes of self-help, along with national and international aid, seek to encourage social and economic development.
S3	Fieldwork	The Whangie – glaciation and rural landscapes
		Loch Lomondside – upland/lowland farming, countryside conflicts, Loch Lomond National Park.

## Geography

Year Group	Topic	Activity
S5 Intermediate 2	Physical environments	This has a British Isles context and studies a selection of landscape types – glacial, upland limestone, coasts and rivers. Land uses in these areas are studied using the following structure: - <ul style="list-style-type: none"> <li>• The impact of the activities</li> <li>• The conflicts which can arise</li> <li>• The management strategies and solutions</li> <li>• The role of public and voluntary bodies</li> </ul>
S5 Intermediate 2	Environmental interactions	This has a stronger emphasis on global issues and evaluating of strategies adopted to manage these.
S5 – S6 Higher	Physical environments	Atmosphere, hydrosphere, lithosphere, biosphere.
	Human environments	Population, rural, industrial and urban geography.
S5 – S6 Higher	Environmental interactions	River basin management, urban change and management.

## History

Year Group	Topic	Activity
S1	Early (Stone-Age) People	Link between people and the environment – changes from food farming and changes in technology.
S1	Vikings	Population growth and food problems causing the Vikings to become raiders/explorers.
S2	Glasgow	Changes in the physical and economic landscape of the River Clyde and its' impact on Glaswegians.
S3	Population Growth and Movement	Reasons for, and consequences of, population growth and movement.
S3	Technology	Impact of railways on the environment and the way people lived.
S4	Russia	Impact of industrialisation.
S5	Modern Studies	Industrialisation in China and its' effect on the environment, specifically the current Three Gorges Dam Project on the Yangtze River

## Home Economics

Year Group	Topic	Activity
S1	Life Skills Know your neighbourhood	Environmental unit completed by all pupils. Pupils bring in rubbish with discussion of environmentally friendly labels e.g. carrier bags and coke cans etc. Pupils encouraged to play game 'Der Feger' on Hamburg's Cleansing Department website <a href="http://www.stadtreinigung-hh.de">www.stadtreinigung-hh.de</a>
S3 – S4 Home Economics	Design Features	Discussion and bookwork on conservation of resources, energy saving tips, reduction of running costs, consumer advice on purchase of energy efficient appliances, recycling and excess packaging. Use of website <a href="http://www.est.org.uk">www.est.org.uk</a>
S1 – S2 Fabric S3 – S4 Fabric Technology S5 – S6 Fabric	Throughout programmes	Economy taught and practiced at all times. Careful cutting out and placing of patterns leads to fabric being saved and costs being reduced. References to care labels/ wash codes on clothes to avoid dry cleaning and bleaching.
S1 – S2 Food S3 – S4 Kitchen Tech S5 – S6 Food	Throughout programmes	Pupils taught economy in use of energy and cooker use Constantly reminded about not wasting resources such as washing powder, soap powder, liquid soap, water and food.
Staff and pupils	Departmental good practice	No ink allowed in the department in S1-S4 thereby avoiding 'tippex' and possible vandalism. Pupils encouraged to bring in own dish to cut down on use of foil trays. Fabric scraps kept and used for smaller items such as patchwork, collage and decorative work. No pupils allowed to cut fabric until approved by member of staff. Plastic wallets and folders recycled year on year. Jotters not used anymore as often were only ½ used... loose-leaf paper used instead. Printed sheets collected and reused year on year. Out of date paper, washed food tins, plastic bottles, drinks cans all go into the large blue bin for recycling. Pupils encouraged to make cotton bags for use instead of plastic carriers. The P.T. collects shopping using cotton carriers (not plastic) and gets all shopping en-route to school to reduce wasted journeys. Buy British! – pupils encouraged to buy British ... Scottish if possible ... to reduce carbon footprint. Fruit and vegetables bought loose where possible. Sign above sink in Fabric Room about being careful what goes down the drain. Air fresheners are not used in the department ... windows are opened and fresh flowers scent the rooms.

## Home Economics

Year Group	Topic	Activity
		<p>Ironing Board covers are made in-house to save buying them.</p> <p>Glue is never used ... everything is sewn on to save waste and mess.</p> <p>Empty cartons are saved and used again as teaching aids ... no need to buy.</p> <p>Walls are decorated with articles from free magazines or newspapers cutting out need to buy glossy productions.</p> <p>“Own Brand” products bought saving on buying heavily advertised and brightly coloured packaging.</p> <p>Plastic (margarine/butter) tubs and metal biscuit tins reused for storage of materials such as pin trays and fabrics.</p> <p>Plastic carrier bags used to line bins.</p> <p>Great care taken of all equipment to help extend life.</p> <p>Pupils taught that 1 pair of hands = 1 paper towel.</p> <p>Changes of course kept to a minimum to avoid wasted paper.</p> <p>Use of printers in greyscale to save on coloured ink.</p> <p>Bleach not used.</p> <p>Pupils taught to ‘power off’ when finished with a machine.</p> <p>And finally!! ... constant reminders and encouragement to avoid waste and therefore save money and energy.</p>

## ICT

Year Group	Topic	Activity
S2	Disposal of bubble gum	Awareness of environmental issues related to the disposal of bubble gum
S1 – S6	Departmental good practice	Awareness of wasting resources such as paper and toner by careless printing practices
S1 – S6	Internet use	Using the internet increases the ability to shop carefully both on price and other issues such as material content
S1 – S6	Benefits of electronic communication	In the move towards a ‘paperless’ society electronic communication is reducing the need for paper and paper products
S3 – S6	Company policies on environmental issues	Looking at how major organisations have a responsibility to the environment and recycling e.g. Tesco and the Body Shop
Staff	Departmental good practice	<p>Toner cartridges sent to the office for recycling</p> <p>Use of departmental Flash Drives for notes/past papers etc to save paper/photocopying etc</p>
Staff	Departmental good practice	Waste paper put into special bin for John Meechan for his MTA group

## Mathematics

Year Group	Topic	Activity
S3 – S6	Departmental good practice	Photocopied sheets re-used for several years (non-consumable).
S1 – S6	Departmental good practice	Care taken of all maths apparatus (calculators, rulers etc) to help cut unnecessary costs.
S1 – S6	The school environment	Pupils cajoled by staff to use the litter bins provided.
Staff	Recycling	Recycling ink cartridges from printers. Purchase of recycled stationery products (where affordable).

## Modern Languages

Year Group	Topic	Activity
S3 – S4	My Town Topic	Introduces the basics: <ul style="list-style-type: none"> <li>• environmental issues</li> <li>• clean/dirty town</li> <li>• pollution</li> <li>• traffic, etc</li> </ul>
S5 S6 Advanced Higher	City environment	A more, in depth, study of the environmental issues in a city environment. A large advanced topic covering <ul style="list-style-type: none"> <li>• nuclear power in France</li> <li>• renewable energy</li> <li>• eco threats such as global warming and dangers to flora &amp; fauna</li> <li>• how to halt pollution/ozone layer depletion.</li> </ul>
S1 – S6	Eco Issues	All pupils encouraged by staff to use the litter bins provided to keep the school environment clean.

## Music

Year Group	Topic	Activity
S3 – S6	Departmental practice	Photocopied sheets collected and re-used for several years.
S1 – S6	Departmental practice	Care taken of all musical instruments and equipment to help extend life.
S1 – S6	School environment	All pupils encouraged by staff to use the litter bins
Staff	Recycling	Recycling ink cartridges from printers. Purchase of recycled stationery products.

## Pastoral Care

No departmental response to date.

## Physical Education

Year Group	Topic	Activity
S3 – S6	Good departmental practice	Printed sheets collected and re-used year on year.
S1 – S6	Good departmental practice	Care taken of all equipment to help extend life.
S1 – S6	Eco Issues	All pupils encouraged by staff to use the litter bins provided to keep the school environment clean.
Staff	Recycling	Recycling ink cartridges from printers.

## Physics

No departmental response to date.

## Religious Education

Year Group	Topic	Activity
S1 - S2	World Religions	Pupils examine the attitudes of the prophetic religions to the environment within the general study of these religions.
S3	Humanism	The Humanist concern for the environment; the need to take full responsibility for the future of the planet.
S4 – S5	Buddhism	Buddhism stresses the interconnectedness of all living things, and maintains that how we treat the natural world will affect us in the future.
S6	Bio-Ethics	Genetic research and related issues.

## Science

Year Group	Topic	Activity
S1	Matter	Awareness raised of the industrial process used to make iron.
S1	Breathing and Digestion	Awareness raised of the disposal and treatment of human waste.
S1	Energy	Awareness raised of renewable and non-renewable sources of energy.
S1	Acids, Alkalis and Metals	Awareness of chemicals and their safe disposal in the environment.
S1	Genetics	Awareness of how the natural and physical environments can affect genetics.
S1	Heat	Awareness raised of energy efficiency and energy loss.
S1	The Cosmos	A research topic where all pupils gain an awareness of the universe, our place in it and the fragility of life on planet Earth.
S1	Reproduction	
S1	Optics and Acoustics	Pupils learn about noise pollution and also record noise polluters in the school grounds using a sound level meter e.g. cars/vans in Gibson Street.
S2	Chemical Reactions	Pupils gain awareness of the dangers posed by specialised chemicals and how to dispose of them safely without polluting the environment
S2	Food Webs	Extensive use of the school grounds by all pupils to: <ul style="list-style-type: none"> <li>• record the abundance of wild plant life using quadrats</li> <li>• the use of light, moisture and pH meters to record soil conditions and acidity levels.</li> </ul>
S2	Electricity	Awareness raised of the power rating of appliances and their associated cost.
S2	Atomic Theory	Awareness raised of chemical elements and compounds and possible sources of pollution.
S2	Electronics	Awareness raised of the materials used to manufacture electronic circuit boards and their links to pollution and cancer.
S2	Cell Processes	Awareness raised of environmental factors affecting cell processes.
S2	Forces	
Staff and pupils	Good departmental practice	Recycled stationery purchased. Recycling of printer cartridges. Running the pupil Eco-Committee.

## Support for Learning

The Support for Learning department has no formal curricular links to the environment, but they contribute substantially to the eco- ethos of other departments in the school.

## SMT

Year Group	Topic	Activity
S5 – S6	Fulcrum Challenge 2005	Two Hillhead High School senior pupils are going to India as part of a 24 pupil team to help rebuild a local school as part of the Fulcrum Charity.
Staff	Recycling	Ink cartridges from printers.
Staff	Recycling	Mobile phones.
Ideas for future: S1 – S6	Environmental Awareness	Invite more local speakers to challenge and inform on ways of working.

## Technical

Year Group	Topic	Activity
S1 – S4	Common Course: Craft & Design Practical Craft	Use of materials including: Wood Metal Plastics
S1 – S4	As above	Wood obtained from suppliers claiming to have sourced the material from managed forests.
S3 – S4	Bird boxes	Build bird nesting boxes for local primaries.
S5 – S6	Bridge Building Initiative	Build a model of an environmentally friendly bridge over the River Kelvin.
Staff		Recycling printer cartridges.