



The EthCo Interdisciplinary Tasks

Your future role: An Ethical Scotland in the Global Economy

16. Sustaining the World Environment

Aimed at a Curriculum for Excellence at all levels

Developing Global Citizens through An Interdisciplinary Approach

EthCo sets out to provide a task-based framework to allow young people to explore the United Nation's Millennium Development Goals, and how they impact on world poverty and growth. The concept of ethics in business is also investigated, and pupils will contextualise that within Scotland's place in the world economy. Through EthCo, pupils will be encouraged to see how the choices made by individuals within businesses, organisations and communities impact on economic life in their own and other countries. Using action-based enterprise activities they will take the first steps towards 'making a difference', through positive challenges to existing practices, illustrating that consumer and citizen power can impact on poverty reduction and economic success. Pupils will learn about, and raise awareness of, the 'Millennium Development Goals' to their families, their communities and local businesses. Young people are the employers, employees, and community activists of the future and EthCo hopes to embed a global perspective for the longer term. They, along with their teachers and their communities, hold the key to implementing actions which impact on the Millennium Development Goals. It is hoped that their energy and hope for the future may be harnessed, and their actions and attitudes affected, by learning global Citizenship through these tasks.

EthCo will provide approaches and materials within a 'Curriculum for Excellence' to link together Development Education, Enterprise Education, Financial awareness, understanding of business, citizenship education, education for sustainable development, and other cross-cutting themes. These are brought together in the EthCo interdisciplinary Tasks and, since the tasks contribute to many of the Learning Outcomes in the Curricular Areas of CfE, can be built in as part of the on-going curriculum to help develop Global Citizens.

Pupil Led—Teacher Prompted: EthCo is not a topic, but rather an open ended process which teachers are free to adapt to their own curricular needs. It is envisaged that EthCo will run as an enterprise activity based on a real task, and is set up to provide appropriate learning outcomes within ACfE. As such EthCo encourages interdisciplinary learning between, and across the Curricular areas. It is focused on international education, and is designed to fit in with a range of existing initiatives available to schools, such as Eco Schools, financial education, social enterprise and others. Each task facilitates learning via a thinking/discussing phase, a research phase and a doing phase, and finishes on a demonstration of learning outcome. Timescale for the task is at the discretion of staff.

The EthCo tasks are not set to any particular Curriculum for Excellence level and Teachers may adapt them to suit their purposes. In all cases this is best done by matching the learning to the curricular level being taught, however it is perfectly acceptable to adapt the task content, or reduce or extend the scope of the task, as long as the EthCo learning outcomes for the task and your aims are met.

The tasks are numbered only to ease identification and not to indicate an order of work.

Hints, tips and resources are detailed for each task in tandem with suggested links to existing initiatives.

Our website containing additional information and resources is available at www.EthCo.org.uk

The Queensland Rich Task project is acknowledged for the inspiration for this task format.



EthCo Interdisciplinary Tasks

Sustaining the World Environment

Aimed at a Curriculum for Excellence at all levels

Working to sustain the environment for all living things

This task sets out to look in depth at the environment, and the changes which have been and are taking place which affect all living things on the planet. The study will look at biodiversity on land, sea, and air; the natural changes which occur, and the changes brought about by the activities of the peoples of the World. Pupils will also consider the living conditions of peoples around the World, and what needs to be done in many parts of the World to improve these conditions. The pupils will then demonstrate their learning to an audience.

The Millennium Development Goals have targets set to help the World sustain the environment. *Investigate these targets and discuss why they have been set, and the likelihood of their being met.*

What is biodiversity? Explore and discover the vast range of life on this planet. What are the critical issues for the survival of any particular species? What species have been lost to us in the past and why? Which species are under threat at present? Are species still becoming extinct? How does this happen? *Research, discuss and record your findings.*

All living things have an optimal habitat. Choose one species from each of land, sea, air, and plant life and explore their habitat. What conditions are needed for them to survive? What puts them at risk? Do the actions of people affect them? *Collate and record your findings.*

Plant life is important too. Why is this? We depend on plants for many things - find out what. Forests are being lost all over the World, why? Is it important to preserve plant life? Why? *Investigate, debate and record.*

Can you create a natural habitat in the classroom for you to study?

There are more insects than people on this planet. Insects are often regarded as pests, but do they have a beneficial effect? Do insects help sustain the environment? *Investigate, discuss and record.*

People live in a variety of habitats from great cities to remote isolated communities. *Explore this variety and create illustrated materials to show the variety. What are the essential needs of each habitat to sustain healthy living?*

Many people live in very poor, often unhealthy conditions - slums, shanty towns, dirt and squalor. Why do people live this way? Do any choose to live this way? What would you like to see done about this? *Discuss, debate, and report.*

Do slums exist now in Scotland? What about in the past?

One of the essentials for all living things is water. What are the issues affecting water? Do all living things need clean water? How important is it for the peoples of the World to have access to clean water? How is this done? *Research and report.*

The demonstration of learning will be in the form of a seminar with a series of stalls set up to show the different aspects studied in the course of this task. At the beginning of the seminar, the stallholders will give a brief presentation on 'why we must sustain the environment'. Each stall will be able to show the results of the investigation, with illustrations and models to suit. The stallholders will give a short talk on the purpose and findings represented on their stall to the attendees as they visit each stall. The end of the seminar will feature a question and answer session with the stallholders' representatives forming an 'expert' panel.

Planning and developing the task:

Staff are free to develop this task in a manner which suits the individual needs of the school, as long as the EthCo learning outcomes are achieved.

The planning can include any CfE curricular area which has a natural link with the task, and can be designed to suit the strengths of the school and the CfE level of the pupils involved

The Ethco Learning outcomes for this task are :

- To learn about the 'Millennium Development Goals', their development and implications for the world community.
- To learn about ethics and develop the ability to recognise and demonstrate ethical behaviour.
- To learn about Scotland's contribution to the Millennium Development Goals.
- To develop skills in learning, research, presentation, discussion and argument.

Resources, hints and tips:

Open web searches can be very fruitful sources of information but the results need constant critical support and supervision from the teacher to ensure suitability. Some notes on the use of 'Philosophical Inquiry' are provided.

There are clear links to: 'Enterprising approaches to learning and teaching', 'Entrepreneurial learning', 'Vocational and work based learning', and 'Careers education'.

Some issues which might be explored are: environmental issues, sustainable issues, variety of species, evolution, extinction, fossils, habitats, plant life, insect life, interaction of variety of life, essentials for life, water for life, deforestation, food crops, medicines from plants, drug companies, energy companies, mining, pollution, slum creation, human rights, political awareness, education, universities, etc., etc., etc.

Class organisation: To provide the teams for the demonstration, it is necessary to work in groups. Best results often come when the principles of cooperative or collaborative learning are employed. Use of 'Philosophical Inquiry' or similar can assist the discussion of the issues involved. Adequate encouragement, time, resources and teacher support should be given to facilitate a high level of research, discovery and sharing by the pupils. The sections in the full bold outline should be taught by the teacher to ensure coverage and understanding.

The demonstration of learning should take the form suggested and to an appropriate audience. The audience can be drawn from the community and represent a range of interests, prizes may be awarded by the school as appropriate. The event may be videoed, then shown to and analysed by a larger audience.

Other variations of the presentation are possible depending on the aspirations of the school.

The assessment of performance of the task should be made by staff using the criteria below. The assessment of the individual should also include assessment of their contribution to the task and individual performance in class work, related to the appropriate CfE Learning Outcomes.

CfE Curricular Areas , Levels, and capacities.

Many of the CfE curricular areas : Expressive Arts, Health and Wellbeing, Languages, Mathematics, Religious and moral education, Science, Social Studies, and Technologies, etc., have CfE learning outcomes which can be contributed to by completing this task and are shown on the back page.

The full extent of this contribution, and indeed whether the outcome can be satisfied entirely, depends on the teacher's individual planning,

When planning a task the appropriate learning outcomes for the level being taught should be applied.

Clearly in completing this task, impact will be made on the CfE capacities of 'Successful Learners, Effective Contributors, Confident Individuals and Responsible Citizens'

Assessment of the task:

The demonstration of learning in the task is assessed as 'high quality', 'quality', 'acceptable' or 'fair' using the following descriptors.

In a group demonstration, all members are given the same task award. Individual performance should be assessed and reported in a formative manner using the appropriate CfE learning outcomes. The individual contribution to the task should also be commented upon.

A high quality demonstration of learning is evidenced by:

A clear statement showing understanding of the variety of issues involved in sustaining the environment around the world.

Clear demonstration of understanding of ethics and standards. Clear demonstration of how this should apply and be monitored.

Evidence of consideration and understanding in depth of the benefits to developing countries of sustaining the environment.

Showing good knowledge of the Millennium Development Goals, their impact on the developing countries and the environment.

High presentation skills with confident responses to questioning showing excellent background knowledge.

An acceptable demonstration of learning is evidenced by:

A clear statement of the variety of issues involved in sustaining the environment around the world.

Clear demonstration of understanding of ethics and standards. Clear demonstration of how this should apply.

Evidence of consideration and understanding of the benefits to developing countries of sustaining the environment.

Showing knowledge of the Millennium Development Goals and their impact on the developing countries and the environment.

Good presentation skills with responses to questioning showing good background knowledge.

A quality demonstration falls between these, a fair demonstration falls below.

Relating to a 'Curriculum for Excellence'

Every area of the curriculum can make an important contribution to the Ethco learning outcomes.

This EthCo Interdisciplinary Task can contribute to the coverage of the 'Curriculum for Excellence outcomes and experiences'.

The impact in each case is dependant on the specific focus given to the task, and in many cases to the choice of topic studied within the task by the individual pupil, and this should be considered when determining coverage.

Expressive Arts

Explores how global issues and themes such as identity, shared humanity, difference, diversity, conflict and justice are represented in art, music dance and sporting activities. Considers how the expressive arts are used to express protest at social injustice and promote visions of positive change. Provides opportunities to learn about and from different cultures through the arts.

Can contribute to the following CfE outcomes:

EXA 1-01a; 1-02a; 1-03a; 1-04a; 1-05a; 1-07a
(if a consideration has been made of the arts of the developing countries and artistic expression used in the presentation.)
EXA 1-10a (If dance across cultures is featured.)
EXA 1-13a; 1-15a (If drama used in the presentation.)
EXA 1-18a (If performing music from different cultures is part of the presentation.)

EXA 2-01a; 2-02a; 2-03a; 2-04a; 2-05a; 2-07a.
EXA 2-09a; 2-10a; 2-11a. (if drama is explored)
EXA 2-13a; 2-15a. (if drama features)
EXA 2-18a; 2-19a. (if music features)

EXA 3-01ab; 3-02a; 3-04a; 3-07a

Health and Wellbeing

Develops appreciation of diversity and encourages critical thinking through the exploration of similarities and differences between people and the discussion of social and moral dilemmas. Explores wellbeing in all senses, from physical health to financial wellbeing and key factors in this, both local and global.

Can contribute to the following CfE outcomes:

HWB 1-01a; 1-02a; 1-04a; 1-05a; 1-08a; 1-09a; HWB 1-10a; 1-11a; 1-12a; 1-13a; 1-14a; 1-19a;

HWB 2-01a; 2-02a; 2-04a; 2-05a; 2-08a; 2-09a; HWB 2-10a; 2-11a; 2-12a; 2-13a; 2-14a; 2-19a;

HWB 3-01a; 3-02a; 3-04a; 3-05a; 3-08a; 3-09a; HWB 3-10a; 3-11a; 3-12a; 3-13a; 3-14a; 3-19a;

Languages

Explores issues of identity and diversity by considering similarities and differences between peoples, places, cultures and languages. Develops awareness of global interconnectedness in that languages are continually evolving and borrowing from each other. Provides opportunities to explore global issues while developing language skills.

Can contribute to the following CfE outcomes:

(there are no first level outcomes in modern languages)
If a consideration of the language of developing countries is given, then:

MLAN 2-01abc; 2-02a; 2-03a; 2-04a; 2-05a.

If the task and the presentation are made in a language other than English, then a significant number of these outcomes will be targeted.

It is also possible to consider the language of the developing country

Literacy and English

Explores values, beliefs, and experiences of different groups of people, and themes common to people the world over, through texts from a range of cultures and traditions. Develops empathy, communication skills, the ability to argue effectively, critical thinking and media literacy.

Can contribute to the following CfE outcomes:

LIT 1-02a; 1-04a; 1-05a; 1-06a; 1-07a; 1-08a; 1-1-09a; 1-10a; 1-13a; 1-14a; 1-15a; 1-16a; 1-18a; 1-20a; 1-21a; 1-22a; 1-23a; 1-24a; 1-25a; 1-26a; 1-28a; 1-29a.
ENG 1-03a; 1-12a; 1-17a; 1-30a

LIT 2-02a; 2-04a; 2-05a; 2-06a; 2-07a; 2-08a; 2-09a; 2-10a; 2-13a; 2-14a; 2-15a; 2-16a;
2-18a; 2-20a; 2-21a; 2-22a; 2-23a; 2-24a;
2-25a; 2-26a; 2-28a; 2-29a.
ENG 2-03a; 2-12a; 2-17a; 2-27a; 2-30a

LIT 3-02a; 3-04a; 3-05a; 3-06a; 3-07a; 3-08a; 3-09a; 3-10a; 3-13a; 3-14a; 3-15a; 3-16a;
3-18a; 3-20a; 3-21a; 3-22a; 3-23a; 3-24a;
3-25a; 3-26a; 3-28a; 3-29a.
ENG 3-03a; 3-12a; 3-17a; 3-27a; 3-30a.

Numeracy and Mathematics

Provides opportunities to illustrate mathematical concepts and processes by means of issues in local, national and global society.

Promotes opportunities to consider the influence of different cultures on mathematics and the history of development of maths.

Develops critical thinking around use, presentation and manipulation of data.

Can contribute to the following CfE outcomes:

MNU 1-09ab; 1-20ab;
MTH 1-12a; 1-17a; 1-21a.

MNU 2-09abc; 2-20ab
MTH 2-12a; 2-17c; 2-21a.

MNU 3-01a; 3-03ab; 3-07a; 3-09ab; 3-20a.
MTH 3-17b; 3-20b; 3-21a.

RME and RERC

Explores issues of justice, equality, care for others and for the planet, and peace and conflict from different perspectives. Develops awareness of diversity through exploring different values, beliefs and attitudes. Develops empathy, critical thinking, respect for others and the ability to argue effectively. Explores the role of religious belief in global issues and perspectives.

Can contribute to the following CfE outcomes:

RME 1-04a; 1-05a; 1-06ab; 1-07a; 1-09abc.
RERC 1-25a; 1-26a; 1-27ab.

RME 2-04a; 2-05ab; 2-06abc; 2-07a 2-09abcd
RERC 2-25a; 2-26a; 2-27ab.

RME 3-04a; 3-05abc; 3-06ab; 3-07a;
3-09abcde.
RERC 3-25ab; 3-26ab; 3-27ab.

With careful consideration there may be opportunities to contribute appropriately to other outcomes

Science

Engages with the social, cultural and economic contexts in which scientific enquiry takes place. Explores ethical issues surrounding science and its pursuit and uses, considers the contribution of science to the debate on sustainable development, develops appreciation of interdependence within the natural world and between people and planet. Provides opportunities to explore the contribution of different cultures to science.

Can contribute to the following CfE outcomes:

SCN 1-03a; 1-04a; 1-13a; 1-20a.

SCN 2-03a; 2-04ab; 2-20ab.

SCN 3-03a; 3-04ab; 3-05b; 3-13c; 3-20ab.

Social Studies

Questions, investigates and critically engages with issues affecting peoples lives throughout the world, develops understanding of global interdependence.

Explores differences and similarities between events, people, places, cultures and environments through time. Considers significance of individual and collective action, critical thinking and interpretation.

Explores the shaping of society, political, environmental and economic.

Can contribute to the following CfE outcomes:

SOC 1-04a; 1-06a; 1-07a; 1-08a; 1-09a; 1-12ab;
1-13ab; 1-15a; 1-16a; 1-17a; 1-18a; 1-20a; 1-21a; 1-22a.

SOC 2-01a; 2-02a; 2-04a; 2-06a; 2-07ab;
2-08ab; 2-09a; 2-12a; 2-13a; 2-14a; 2-15a;
2-16abc; 2-17a; 2-18a; 2-19a; 2-20a; 2-21a; 2-22a.

SOC 3-01a; 3-02a; 3-04a; 3-05a; 3-06ab;
3-07a; 3-08a; 3-10a; 3-11a; 3-12a; 3-13a;
3-14a; 3-15a; 3-16a; 3-17ab; 3-18a; 3-19ab; 3-20ab; 3-21a.

Technologies

Considers the impact of technological development on society and on quality of life.

Addresses sustainability issues in product design, food production and consumption. Considers the manufacturing and production methods across the world and the ethics involved.

Considers the impact of ICT developments across the world on individuals, communities and society. Impact of ICT on day to day living.

Considers business activities, organisation and ethics.

Can contribute to the following CfE outcomes:

TCH 1-01abc; 1-02a; 1-03ab; 1-04ab; 1-08a;
1-15a.

TCH 2-01ab; 2-02ab; 2-03ab; 2-04ab; 2-08a;
2-15ab.

TCH 3-01a; 3-02a; 3-03a; 3-04a; 3-06a;
3-07ab; 3-08abc.