

Worldwise

Geography Awareness Week

25th-29th June 2007

Panel 1: Geographical Futures

Welcome to Geography Awareness Week (GAW), one of a range of Worldwise student oriented activities aimed at promoting engaging geography in schools for pupils ranging from early years to post 16 (see also the Worldwise Local Quiz and the Online Quizzes). We hope that you enjoy using the resources on the following panels either during the designated week, or at another time more convenient for your school.

We hope that examples of students' work showing their engagement with this year's GAW theme will be submitted to us here at the GA (please email details or provide relevant school or geography department website links to: rgill@geography.org.uk). The best entries will be showcased via the GA website and the 2008 GA Annual Conference. Entries from the KS3/4 category could be used in support of your school's overall involvement in Worldwise, with a view to possibly being invited to take part in the 2008 Worldwise Challenge (a free-of-charge residential weekend of fieldwork activities for Y8-Y10 students that usually takes place during the month of April). The culmination of the annual Worldwise activities is an invitation for a pupil from each of the top three or four schools taking part in the Challenge to represent the UK at an International Geography competition. In 2008 the International Geographical Olympiad will be held in Morocco.

We believe that the suggested GAW activities, outlined on the following panels, will allow students to appreciate the range of views and issues that surround this important element of Geography learning. They should also provide opportunities for students to reflect on and clarify their own views, ideas, values, attitudes and experiences. With improved understanding, young people should start to envision the sort of future that they might want for themselves and for society in general and how *they* can help to shape it.

The other GAW panels this year cover the following areas:

- 2: Where will I live?
- 3: Urban change processes
- 4: Transport – past, present & future
- 5: Fair Trade
- 6: Ocean exploitation
- 7: Where will I learn?
- 8: Global warming
- 9: Global futures websites

Further help on planning for GAW can also be found at the following link:
www.geography.org.uk/squaretwo

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Geographical Futures 2: WHERE WILL I LIVE?

Creating A Crime Free Housing Estate

Young people have the opportunity to plan for the future, encouraging them to provide a safe and secure environment in which everyone would wish to live.

Take a walk through a local housing estate:

- Take pictures of things you like (hedges, flower beds, new car etc) and things you don't like (burnt out car, garden gnomes etc).
- Conduct an environmental quality survey to look at housing quality, gardens, parking provision, quality of footpaths, street lighting etc.
- Use GPS, PDA's and digital cameras to make recordings, which can be edited into a virtual fieldtrip back in school.
- Different scale maps can be used to plot environmental quality across the area visited.
- Young people can be introduced to futures by planning a crime free housing estate that they can relate to from previous work. The example below is adapted from the Secondary National Strategy 'Leading in Learning' whole school initiative Geography subject exemplification for audience and purpose.

Neighbourhood watch scheme	CCTV on each street corner	Bushes other vegetation kept short
Houses with no fences	Pubs close at 11 o'clock	Well lit bus stops
Well maintained footpaths	Anti graffiti paint used on walls and street furniture	Terraced housing with wide alley way at the rear
Open spaces are well looked after	No on-road parking allowed	Local shops have shutters
Houses have burglar alarms fitted	Police walk the estate regularly	Cul-de-sacs off main roads
Staffed car parks	Access only roads	Gated roads
Street lights spaced close together	Job opportunities nearby	Low maintenance gardens
No high rise buildings	Community building	Gravel pathways
Local youth club open every week night till 9pm at the local school	Residents given a 'combating crime' information leaflet	Newsletter to residents about the area, events, crimes etc

- Choose 10 cards (from the above) to select the features of your crime free housing estate.
- Can you put them in a rank order and explain your thinking?
- Which card you would have chosen if you could pick one more? Why?
- Use a blank version of the maps previously used, or draw your own, to plot some or all of the features of your crime free estate.

Investigate the Living Geography: Building Sustainable communities project on the website www.geography.org.uk

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Geographical Futures 3: URBAN CHANGE PROCESSES

Fieldwork at the International Geographical Olympiad 2006, Brisbane, Australia focussed on sustainable urban communities, using Kelvin Grove Urban Village: www.kgurbanvillage.com.au as a case study.

Extract from advance information for the fieldwork exercise:

“The fieldwork exercise will focus on sustainable urban communities. Some of the features of these communities are: high density / mixed tenure & use / high quality design & construction / walkable. Sustainable urban communities are compact, walkable, mixed-use neighborhoods and towns that are a pleasure to live in. Known as new urbanism towns and urban villages, these places are becoming more popular as people have had enough of suburban traffic jams, and poorly designed urban areas. Urban villages are places where everything you need is within walking distance (shops, restaurants, movies, services), including attractive public squares to relax in and meet people.

In a sustainable urban community you can live without a car, since the compact layout makes it easy to get around on foot, bicycle, rollerblades, or by train and light rail. These compact villages are a drastic contrast to our sprawling suburbs where everything is spread out, separated by uses, and connected only by roads and highways. This makes a car an absolute necessity in suburbia, and since everyone has to drive for every single trip they make, we have constant, irritating traffic jams, all day long. Life in sustainable environments is completely different – pedestrian oriented, and offering a higher quality of life, and a friendlier, more pleasant place to live. (Adapted with permission from New Urbanism)”

KS4/5 students could use a range of references to research urban villages; for example:

- The Case for Urban Villages <http://www.fscr.org/html/2000-01-05.html>
- New Urbanism <http://www.newurbanism.org/>
- Wikipedia definition http://en.wikipedia.org/wiki/Urban_village

Ways to develop the work further across other key stages could include:

- Identification of locations in UK [examples: <http://www.neweastmanchester.com/introduction/> and <http://www.holbeckurbanvillage.co.uk/>] where similar fieldwork could be carried out or activities conducted as a desktop decision making activity.
- For location and surrounding areas construct age/sex pyramids (current and projected, based on findings from other parts of the country) to identify those groups likely to move into the regenerated area as well as out of neighbouring areas, to create a cultural and social cross section of society within regenerated area, creation of services to meet the needs of local population.
- Produce land-use surveys of local industry, identifying employment opportunities, growth areas, etc as outlined above.
- Research into sustainable living, working and learning environments at different scales within and beyond your own immediate area.
- Carry out traffic surveys linked to sustainable travel, public transport networks/opportunities.
- Carry out pavement furniture survey and accessibility audits for all communities within the area.

Useful link:

<http://www.geography.org.uk/projects/gtip/thinkpieces/esd/> for useful ESD background information.

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Geographical Futures 4: TRAVEL – PAST, PRESENT & FUTURE

How do we travel? / Where do we travel? / Do we choose the most convenient or the most sustainable methods of transport? / Does how we travel today really matter to tomorrow? As we move towards becoming more responsibly aware of our actions and their impacts on the environment we should be guiding students towards thinking about how sustainable their journeys are.

Activity One

Ask the pupils to survey how they and their peers travel to school. Considering the following factors pupils should map/chart and display the results in the most appropriate manner - mode of transport, distance travelled and alternative options.

Activity Two

Using the following websites as a starting point, students should work out the carbon emissions for their journey to school and the total carbon emissions for the cohort of results they collected in activity one.

<http://www.earthday.net/footprint/index.asp>

<http://www.wwf.org.uk/researcher/issues/footprint/index.asp>

<http://www.footprintnetwork.org/>

<http://www.regionalsustainability.org/>

Activity Three

Pupils should plan alternative routes to school in order to limit the carbon footprint that is created by students in their school each day. The following websites may be of use in this exercise.

www.dft.gov.uk/pgr/sustainable/schooltravel

<http://www.sustainabletravelinternational.org/offset/index.php>

Students should be asked to give their reasons for their alternative choices and should be able to acknowledge the possible problems or issues that may hinder people's desire to change to a more eco-friendly mode of transport.

Activity Four

Tourist Destinations – Looking at some of the most common tourist destinations for students in the class, students should work out the different methods of reaching these places. Complete a table to show the estimated time of each method, the cost of each method and the carbon footprint that would be created. This can then lead on to discussions regarding the impact of travel against the experiences gained by visiting new countries and exploring new cultures. Items to discuss could include whether or not travel companies should give the consumer more choice into how they travel or if the traveller should be penalised for their journeys. The Worldmapper website may be a useful starting point:

www.sasi.group.shef.ac.uk/worldmapper/index.html

Activity Five

Plan the transport for your town in the future. This activity would require some background planning by the teacher. Students should look at historic and present day maps of their local town and map the difference in transport over time (have railways become disused in favour of bus lanes, is there now a town by-pass?). Using the historical maps current town-planning student should create a map of their town for transport in the future. The plans could include alternative forms of travel and transport. Exclusion zones, park and rides etc.

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Geographical Futures 5: FAIR TRADE

The rules of international trade favour MEDC's over LEDC's. Farmers and workers often depend on selling basic products such as tea, coffee and cocoa for their livelihoods. Although prices fluctuate widely the people do not get a fair share of the benefits of trade. Poor working conditions, wages, health and safety and job security prevail. Young people can be made aware of their role as future citizens to change such practices by making positive choices about buying fairly traded food and craft items.

Activity Ideas

- Make a wall display using an Interrupted Mollweide/Eckert IV or VI or similar projection map and packaging to show where Fair Trade products come from.
- Use OXFAM photo set 'Go Bananas' or 'Making A Meal Of It' to examine the journey of bananas or chocolate. Sequence the photographs and add captions.
- Design an 'influence tree' and encourage a local supermarket to stock fair trade products. The tree should identify all the decision makers within the organisation who's support you will need. Research groups like the CO_OP who support fair trade, and Chester, the first Fair Trade City.
- Set up a fair trade stall or run a fair trade week in school with products on display, for sale or sampling to raise awareness or even visit a local farmers market to look for fair trade items.
- Contact your local development education centre to provide materials, resources and perhaps a speaker to support fair trade events in your school.
- Get together a Fair Trade group. Your school council might be the place to start. Ideally the group should have people who are interested in Fair Trade from all aspects of school life – pupils, parents, teachers and governors.
- Get in touch with your local Fairtrade Town group to see whether they can help you, and whether you can help them.
- Look at the criteria you need to meet to gain Fair Trade status. Then start with some of the easiest bits. This will be different in different schools.
- Look at the sample 'Fair Trade Policy' http://www.fairtrade.org.uk/get_involved_school.htm#3 and change it to fit your school. Then get staff, student council and governors to sign up to it.
- Using the same website, look at the list of Fair Trade activities and decide which one looks like most fun, then set about organising it. Or perhaps you've come up with some better ideas yourselves, in which case do those, and let us know!
- Once you're feeling confident do a school assembly to let everyone know about Fair Trade. You could even ask if you could do a short presentation to the staff too.
- Make sure that Fair Trade is being included in relevant lessons. This is probably one for the teachers on the Fair Trade Group to take up with their colleagues, the head teacher, and heads of departments

Resource Links

Fair Trade www.fairtrade.org.uk / Department for International Development www.dfid.gov.uk / www.tidec.org.uk globalisation project and teaching resources / www.cleanclothes.org.uk reports about different labels / www.uniteunion.org.uk & www.cafod.org.uk articles about Asian garment industry and globalisation / www.globalexchange.org articles on trade issues / www.oneworld.org up-to-date global news / www.dubble.co.uk how a chocolate bar is used to promote fair trade / a fair-trade village www.haworthfairtrade.org.uk

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Geographical Futures 6: EXPLOITATION OF THE WORLDS OCEANS'

“Without water our planet would be one of billions of lifeless rocks floating endlessly in the black inky void” / “Over 90% of the Earth’s biodiversity resides in the ocean” / “Through improved knowledge of the ocean system we can become impassioned to work towards curing our planet’s faltering health” / “We should call our planet OCEAN” [Fabien Cousteau in ‘OCEAN – The World’s Last Wilderness Revealed’, published by Dorling Kindersley, 2006].

We tend to study the land surface, which makes up only about 30% of the earth’s surface area. We know much less about the oceans. But the oceans have an enormous effect on climate, they provide vital clues to tectonic processes, they contain important resources, and are closely linked to global warming and its effects. They are a vital but increasingly fragile resource, and around the world the lives of communities both rich and poor, are linked to the oceans.

- What do you think are the top ten threats to the oceans and their future sustainability?
- For one threat, research the issue, its impact on human and natural environments and identify possible solutions.

What should we know about the oceans? What would be a ‘reasonable knowledge’ of the oceans? Well for instance, can you provide the names and locations on a blank map of the following:

(a) The oceans (b) An island archipelago in each (c) An ocean current in each (d) A volcanic island in each (e) A mid ocean ridge (f) A trough (g) A city or cities on each (h) A major resource in each?

You could also add some more features of your own (natural disasters for example) to this list.

- Are there spatial patterns of natural disasters across the oceans?
- Are particular disasters becoming more common in certain parts of the World over time?
- Could this pattern be attributable to climatic change?

Your choices will probably depend on what you are studying at the moment, places you have visited, or current events in the news.

And now, some further key questions:

- How can the theory of plate tectonics be used to explain the features of the oceans?
- How is global warming affecting the oceans?
- How will this affect people?
- How can we utilise the resources in the oceans in a sustainable way?

Sources

For a complete and exciting account of the oceans:

OCEAN - The World’s Last Wilderness Revealed, published by
Dorling Kindersley-more details from their website, www.dk.com

For a detailed account of the oceans: www.oceansoftheworld.com

And to find out more about threats to our oceans: www.gdrc/oceans/oceans-day.html

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Geographical Futures 7: WHERE WILL I LEARN?

The Government's 'Building Schools for the Future' programme will result in every secondary school in England being refurbished or replaced. There are many opportunities to consider how the environment in which we learn affects us as a community – to study how a place influences the work we do.

Safety and security

- Survey the school and its grounds, asking students to mark onto a base map, areas where they feel excited, stimulated, unsafe, happy, sad, jostled, etc. Where they eat, work and relax. Devise age appropriate symbols to mark onto the map and create a key.
- Use a design software package to produce an interactive map.
- Ask the students to compare their maps with a partner, then to choose one 'uncomfortable' area and think of something that would improve the area.
- Share the ideas around the class and put the best ideas forward to the School Council for action.

Buildings

Walk round the school building outside. What is it about the building's design that tells you that it is a school? Is the entrance easily visible? Is it welcoming for visitors, staff and students? Is it easily accessible for disabled users? Can pedestrians enter the building in safety? Is there enough car parking space or do cars and vans have to park on the grass verges? What are the different building materials being used? Do they make the school blend in with its surroundings? How you could change the building to make it more attractive to visitors and what could you do to make it more identifiable as a learning space?

Social spaces

Where's the best place for a new school seat?

- Conduct a microclimate survey of the outside social spaces around school.
- Use data logging equipment or thermometers and anemometers to identify the windiest and warmest, shadiest and sunniest areas.
- Take measurements at a regular frequency during the day &/or over the duration of several days.
- Produce a map to show these results (no more than 5 words can be used on the map and it must have a key) reflecting the best site for a new school seat.

Sustainable environments

- Brainstorm the meaning of a 'sustainable community'.
- Summarise key points on the board and clarify understanding whole class.
- Put pupils' into pairs with a set of blank 'continuum cards'-nine postcard sized cards, respectively headed:
 - Employment; Heating; Lighting; Services (e.g. waste disposal); Transport; Catering
 - Infrastructure; Flood risk; Environmental effects
- Students complete the cards with information about the school.
- On blank sugar paper students draw a line (continuum) on the edge of the paper, labelling one end of the line 'Most sustainable' and the other end 'Least sustainable'. They then place their cards along the line according to how sustainable they think the listed features are.

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Geographical Futures 8: GLOBAL WARMING

- What's behind the headlines – use www.bbc.co.uk to research global warming linked headlines. Give pupils the headline and ask them “What's the story?” e.g. “POLAR BEARS IN DANGER”

For Different Key Stages

- **KS3-5** pupils could organise a debate: ‘This house believes that people and not natural events are the main cause of global warming’.
- **KS3-4** pupils can watch extracts from the programmes like the David Attenborough Global warming programme and the anti global warming programme “the Great Global Warming Swindle”. Pupils complete a Venn diagram to show the 2 arguments and indicate in the overlap areas of agreement.
- **KS2-5** pupils can think which areas of Britain may be flooded if global warming continues – shade in on a blank map the areas they think will be flooded and then compare with the environment agency maps. This could be at a variety of scales, from local through to national.
- **KS2-5** pupils, working at a variety of scales and within a variety of parameters can try a decision-making activity. Give pupils an OS map extract, which includes a low-lying area, which may flood. They have to decide where a new housing development is to be built. Give them a square of paper to show the area, which will be covered by the development and 5 possible sites, each with positive and negative attributes. Pupils then have to suggest the best location and give reasons.
- **KS2-5** pupils can Play “What if” Give out a list of possible consequences for the world of continued global warming. Pupils have to plan a course of action in each case to counter the problem or ameliorate the situation
- **KS2-4** pupils can complete an investigation into how people can decrease carbon emissions. They must collect their own primary data on people's responses to decreasing carbon emissions. Decide on a school policy to reduce carbon emissions. Investigate eco schools website.
- **All KS** can investigate the idea of carbon footprints. Pupils to work out their own family's carbon footprint. Use www.carbonfootprint.com
- Use the environment agency website to work out the likelihood of flooding in the local area and in other areas pupils may know
- **KS1-4** pupils can make a poster to encourage people to save energy and reduce the effects of global warming. You could laminate the best ones and display them around school especially near light switches and sockets.

Useful web sites

<http://www.environment-agency.gov.uk/>

<http://www.bbc.co.uk/news>

<http://www.metoffice.com/>

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Geographical Futures 9: Probably the Best GLOBAL FUTURES WEBSITES in the World?

	A newer site from New Scientist – this has a range of specialist information including reports and pod casts. High quality like its sister site. http://environment.newscientist.com/
	http://www.magic.gov.uk/ A multi-agency GIS resource for the countryside. Overlay your own data / information relating environmental schemes and designations.
	http://www.dartmouth.edu/~floods/ the Dartmouth Flood Observatory. This US based site detects, maps, and measures major flood events worldwide using satellite remote sensing. An excellent resource for up-to-date flood information and good maps.
	The International Rivers Network has a particular viewpoint. Use it for information about the destructive nature of dams etc. Certainly biased, but interesting. http://www.irn.org/ Comprehensive site.
	www.panda.org is the WWF website. Has a range of quality articles and publications related to environmental issues and threats. Also see http://www.panda.org/about_wwf/what_we_do/climate_change/index.cfm for climate change information
	http://www.environment-agency.gov.uk/ Homepage of the environment Agency. Of particular note is the flood section, including interactive map found at http://www.environment-agency.gov.uk/subjects/flood/
	The Natural England website http://www.naturalengland.org.uk/ . This has been formed as a merger between English Nature, DEFRA and the Countryside Commission. The publications found at http://www.naturalengland.org.uk/publications/default.htm are particularly useful.
	The Campaign to Protect Rural England (www.cpre.org.uk) is a rich source of countryside vs town publications. In particular see offerings on urban sprawl and traffic congestion (both towns and countryside).
	The United Nations Environment Programme (UNEP) http://www.unep.org/ has a host of useful resources and publications. Also find out about the UNEP remit which is large!
	http://www.planetark.org/index.cfm A site designed to help people reduce their amount of waste and general impact on the environment. Some interesting campaigns, which may stimulate lively discussion with students.
	The World Resources Institute (http://www.wri.org). A wealth of high quality downloadable research publications, especially related to environment and biodiversity
	The World Conservation Union is the world's largest and most important conservation network. The priority of the Union's current Programme (2005–2008) is to build recognition of the many ways in which human lives and livelihoods, especially of the poor, depend on the sustainable management of natural resources. Website is http://www.iucn.org/
	http://www.maweb.org/en/index.aspx The Millennium Ecosystem Assessment has assessed the consequences of ecosystem change for human well-being. Top information provided here, including high quality downloadable reports.
	The People & the Planet website provides a global gateway to the greatest issue of our time: the future health and wellbeing of the human family as it presses ever more heavily on the natural resources of our planet. Some good resources including maps and data. www.peopleandplanet.net/
	The National Energy Foundation has a range of information about renewables and energy sustainability. http://www.nef.org.uk/greenenergy/index.htm Lots of links and access to resources, including fact sheets.
	Free, practical help and advice for your organisation to save money by reducing energy use. Some good gear on carbon footprints etc. www.carbontrust.co.uk/default.ct
	http://www.wunderground.com/stationmaps/gmap.asp?zip=00000&wmo=03535&theprefset=WPHO&theprefvalue=0 A favorite here – the personal weather stations Google map. Get LIVE weather info from amateurs round the country + graphs. Good stuff.
	'Ant Veal's' weather. An interesting weather portal at http://www.greatweather.co.uk/ Too many links to specify, but many hidden gems here and some surprises.
	The World Resources Institute (WRI) – Earth Trends (http://earthtrends.wri.org/) an extremely useful and rich source of environmental information organised by habitat. Offers free high quality downloads in the form of PDFs – good for topical geography.
	http://www.ipcc.ch/ The Intergovernmental panel on Climate change is a comprehensive resource relating to all climate change matters. Full-on. Check-out the free PowerPoint downloads.
	http://www.nhc.noaa.gov the US Hurricane Centre. Probably the best general climate site for hurricanes and tornadoes. Has current watches and warnings
	The National Snow and Ice Data Center (NSIDC) http://nsidc.org/ has a beginners guide to glaciers that is worth a look
	http://www.glims.org/ Global land Ice Measurements from space (GLIMS) is a project from the USGS astrology team. It monitors glaciers in response to climate change and global warming. Some interesting maps

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Geographical Futures 10: FOR YOUR OWN NOTES