



Transport

Introduction

The aim of this web site is to provide teachers with a means of

- delivering up to date material.
- using local examples.
- covering a wide range of geographical themes.
- integrating ICT with good classroom practice.
- examining the themes with a sustainable focus.
- applying the differentiated tasks according to ability.

What is Education for Sustainable Development?

“Education for sustainable development enables people to develop the knowledge, values and skills to participate in decisions about the way we do things individually and collectively, both locally and globally, that will improve the quality of life now without damaging the planet for the future.”

(Panel for Education for Sustainable Development, 14 September 1998)

How to use site

The site is designed to allow teachers to integrate the material on the web site into their classroom practice. The material is available in a variety of formats to allow as wide a range of flexibility as possible. The material is available on CD-ROM, and on the Internet. The material can be accessed ‘live’ or downloaded to a single or cached computer.

The material covered within each section is sequential. However the individual topics of each theme may be examined separately. Initially each section is placed in a spatial context and then the relevant geographical themes are explored through a wide range of resources, with tasks and activities throughout. Within each section there is direct reference to the sustainable nature of the area in question. Each section has a terminal task in which the overriding themes are explored. Each section of the site has a Scheme of Work. This outlines the main Teacher activities, as well as pupil activities and links to other sites.

Therefore a wide range of approaches may be adopted when using the site.

- The material may be followed through from beginning to end in a linear fashion, using the tasks within the site and worksheets provided on the teachers’ site.
- Separate areas may be examined as part of a wider unit of work, as exemplar, or applicable tasks.
- Individual pieces of information may be lifted for use with KS3 students or older, or even to address different themes, or different subjects.
- Tasks may be set based on research from the material presented.



The aims of this section are that students will

- Appreciate the complex nature of the current transport situation in Northern Ireland.
- Recognise that there is a high degree of dependency in Northern Ireland on private transport, and that this situation is not sustainable.
- Realise that the transport networks and policy decisions must be carefully managed, to ensure their sustainability.

Learning Outcomes

By the end of this section the students will be able to

- Realise that important decisions have to be made regarding the future of transport in NI.
- Recognise that the transport system in NI is made up of a series of interconnected hubs, gateways and corridors
- Understand that the means by which people and goods have been transported in NI has changed significantly over time.
- Appreciate that the increased use of roads creates problems to which solutions are not easily found.
- Evaluate the methods government can use to influence people's choice of transport.
- Evaluate the extent to which rail can play a part in the sustainable development of transport in NI.
- Realise that NI is reliant on its ports and airports for the import and export of goods, ideas, services and people.
- Appreciate that in order to encourage people to replace car journeys with walking or cycling, a range of policies and changes must be introduced.
- Identify the wide range of opinions there are with respect to the creation of a bypass around a town.
- Realise that the decisions that have to be made to improve transport in a sustainable manner in NI are difficult ones.



Scheme of Work - Transport

Activity - exercise within the site. Individual / Group-work.
Worksheet - PDF printable downloadable file.
Differentiated - depending on ability, age range, differentiation can be upward or downward.

Topic titles	Learning outcomes	Teaching activities	Pupil activities	Further activities [Differentiation U - upwards D - downwards]
<ul style="list-style-type: none"> Introduction 	<ul style="list-style-type: none"> Realise that important decisions have to be made regarding the future of transport in NI. 	<ul style="list-style-type: none"> Identify the main types of transport available. Identify some of the broad issues surrounding the balance between public and private transport. Identify the needs of urban dwellers as opposed to rural dwellers. 	<ul style="list-style-type: none"> Individual/group-work Investigate and discuss the broad issues surrounding the various means of transport using the introductory material. Discuss the main advantages and disadvantages of the different transport types. 	<ul style="list-style-type: none"> Worksheet A [U][D] Complete the worksheet, outlining advantages and disadvantages of the main types of transport.
<ul style="list-style-type: none"> Transport overview 	<ul style="list-style-type: none"> Realise that the transport system in NI is made up of a series of interconnected hubs, gateways and corridors. 	<ul style="list-style-type: none"> Define what hubs, gateways and corridors mean. Establish the concentration in the East, and the more dispersed pattern in the West - relate to population/settlement pattern. 	<ul style="list-style-type: none"> Individual/group-work Complete drag and drop activity. 	
<ul style="list-style-type: none"> The past 	<ul style="list-style-type: none"> Understand that the means by which people and goods have been transported in NI has changed significantly over time. 	<ul style="list-style-type: none"> Identify and explain the main features of the various modes of transport. 	<ul style="list-style-type: none"> Individual/group-work Investigate fact files for each of the transport types. Discuss the differences between the old and the modern. Complete quiz activity. 	
<ul style="list-style-type: none"> Roads (build more roads) 	<ul style="list-style-type: none"> The increased use of roads creates problems to which solutions are not easily found. 	<ul style="list-style-type: none"> Explore the issues behind the two main options defined. Identify some of the consequences of building more roads. 	<ul style="list-style-type: none"> Individual/group-work Investigate the transport schemes that are looking for funding. Complete the activity to decide which should get the green light. 	<ul style="list-style-type: none"> [U][D] Group-work Class discussion, debate. Groups take the case for one of the road schemes each, and argue the case for it to be funded.



Scheme of Work - Transport Continued

Activity - exercise within the site. Individual / Group-work.
Worksheet - PDF printable downloadable file.
Differentiated - depending on ability, age range, differentiation can be upward or downward.

Topic titles	Learning outcomes	Teaching activities	Pupil activities	Further activities [Differentiation U - upwards D - downwards]
<ul style="list-style-type: none"> Roads - public vs. private transport. 	<ul style="list-style-type: none"> Evaluate the methods government can use to influence people's choice of transport. 	<ul style="list-style-type: none"> Outline the nature of the <i>carrot and stick</i> approach - apply to reward or punishment in the school situation. Discuss the general range of <i>carrots/sticks</i> presented. Outline the consequences of providing more public transport. 	<ul style="list-style-type: none"> Individual/group-work Investigate and complete the <i>carrot and stick</i> activity. 	<ul style="list-style-type: none"> Worksheet B [D][U] Why are they carrots or sticks? Place the options in the correct boxes, and explain why they are placed there.
<ul style="list-style-type: none"> Rail 	<ul style="list-style-type: none"> Evaluate the extent to which rail can play a part in the sustainable development of transport in NI. 	<ul style="list-style-type: none"> Outline the main rail networks in NI. Illustrate the previous extent of the network. Explain the current situation following years of under-investment. 	<ul style="list-style-type: none"> Individual/group-work Explore the information available and the timeline of the decline of the network. 	<ul style="list-style-type: none"> [U][D] Using the information in the rail activity, write a letter addressed to the editor of a newspaper. In it explain to what extent you think the rail network in NI should be upgraded and extended.
<ul style="list-style-type: none"> Airports/ Ports 	<ul style="list-style-type: none"> Realise that NI is reliant on its ports and airports for the import and export of goods, ideas, services and people. 	<ul style="list-style-type: none"> Identify the location of the ports/airports. The significance of the East as gateways, rather than the West. Outline food miles concept/activity. 	<ul style="list-style-type: none"> Individual Explore the material, investigating the nature and location of the ports and airports. Complete food miles activity. 	<ul style="list-style-type: none"> Worksheet C[D] On a map of NI, place the ports and airports in the correct location. Describe their location and complete information for passengers, volume of trade etc.
<ul style="list-style-type: none"> Walking/Cycling 	<ul style="list-style-type: none"> In order to encourage people to replace car journeys with walking or cycling, a range of policies and changes must be introduced. 	<ul style="list-style-type: none"> Explanation of the relatively recent reliance on car journeys. Outline the reasons for increased reliance on private cars including better roads and more disposable income. 	<ul style="list-style-type: none"> Individual/group-work Discuss the nature of the vicious circle. Complete activity ranking effectiveness of changes. 	<ul style="list-style-type: none"> Worksheet D [U][D] How far have you walked? Keep a diary for the next week, plotting the number of car/bus journeys made, and the amount walked. [U][D] Write a letter to the principal of your school suggesting ways in which the school could encourage students to walk and cycle more.



Scheme of Work - Transport Continued

Activity - exercise within the site. Individual / Group-work.
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Differentiated - depending on ability, age range, differentiation can be upward or downward.

Topic titles	Learning outcomes	Teaching activities	Pupil activities	Further activities [Differentiation U - upwards D - downwards]
<ul style="list-style-type: none"> Toome Bypass - case study. 	<ul style="list-style-type: none"> Identify the wide range of opinions there are with respect to the creation of a bypass around a town. 	<ul style="list-style-type: none"> Outline the general location of Toome and the circumstances surrounding the request for a bypass. Explain that the decision to construct a bypass is usually complicated with a wide range of people having an opinion. 	<ul style="list-style-type: none"> Individual/group-work Investigate material and discuss the range of opinions and options available. Listen to/read the opinions of interested parties. 	<ul style="list-style-type: none"> Worksheet E[D] Shade map of Toome, showing different zones. Draw on the proposed bypass, and explain why this route was taken. Worksheet F[D] Match the opinion to the person.
<ul style="list-style-type: none"> The Future/ Decision time 	<ul style="list-style-type: none"> Realise that the decisions that have to be made to improve transport in a sustainable manner in NI are difficult ones. 	<ul style="list-style-type: none"> Outline the measures that could be taken. 	<ul style="list-style-type: none"> Individual/group-work Read the resource material and discuss options. Complete report using notepad format. 	