

ICT Vignette 5 Finding web based information in Year 8 Geography

Phase, NC Subject and Topic:

KS3 - Year 8

Geography - Unit 4 Flood Disaster

Focus pupils and school:

An 11 - 19 Catholic boys school, with an intake of approximately 1000 students, approximately 18% of which are bilingual. The EAL department works with around 30 targeted students across Key Stages 3-5. Recent arrivals have included pupils from Iran, Venezuela and Eastern Europe. The most recent arrivals are two twins from Poland. Both pupils are literate in Polish but spoke virtually no English when they joined the school.

Context

The class have been given the task of researching the Water Cycle in preparation for their next geography lesson, and they have been encouraged to use the Internet as part of their research. The two EAL pupils from Poland have brought this task to the EAL Homework Club, which takes place after-school.

The Lesson

A small group of students are attending EAL homework club. The EAL teacher is working with two early stage learners of English whose task is to research the Water Cycle on the Internet. Their geography teacher is revising the Water Cycle with the whole class prior to looking at the topic of Flooding, and then moving on to examine a country case study and the topic of flood disaster.

The aim of the EAL teacher in homework club is to develop appropriate information retrieval and study skills in the learners to ensure that they actively and critically engage with the mass of information which potentially may confront them during their research on the Internet. Both pupils have had experience of ICT in their country of origin and of using the Internet in their last school term in Poland.

The teacher begins by giving the pupils two initial guides – one is a task note card and the other is a key visual. The note card is to help focus the research and the visual requires appropriate labelling:

Task Note Card

TASK:

Find out information on the Water Cycle to help you write a detailed description of what happens.

NOTES:

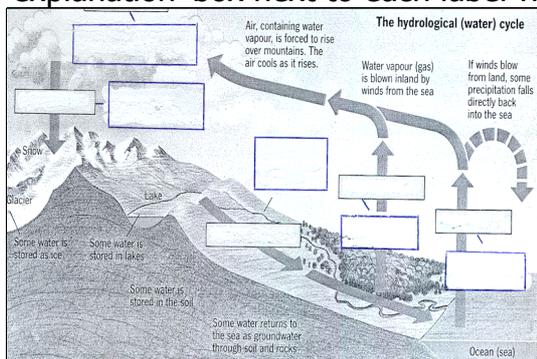
sea → vapour → clouds → mountains → soil → back to the sea

KEY WORDS:

evaporation condensation precipitation
surface run-off transpiration

Key visual

The visual is a modified diagram from a standard school textbook. The teacher has blanked out the key labels (e.g. evaporation, condensation etc,) and added an 'explanation' box next to each label which requires filling-in.



The teacher begins by telling the pupils that they will be given three web pages they are to go to:

www.bbc.co.uk/education

www.epa.gov/OGWDW/kids/cycle.html

<http://ga.water.usgs.gov/edu/watercycle.html>

Before they begin their search, the teacher gives the pupils the possible steps written out on individual pieces of card for one of the sites, and asks the pupils to sequence these in the way they think the sequence will develop:

www.bbc.co.uk/education
The water cycle
precipitation
Geography
Geography sections
Physical geography
Weather basics

This activity lasts for approximately two minutes and forms the basis of a useful and informal discussion between both pupils and the teacher. The pupils then start looking at the three sites, locating and reading the relevant information by using the task note card and labeling the key visual. They are encouraged to write in the labels first, and then to write notes in the 'explanation' boxes in support of each label.

The pupils bring the completed visual to the teacher for checking the next day. Once this has been checked, the pupils write the sentences in their exercise books. The teacher provides them with the following prompts for the recording of the information for their Geography teacher:

Evaporation is the

Transpiration is the

Condensation is when

Precipitation is the water that falls

Surface run-off is when most water returns to

As a follow-up activity, the pupils are directed back to the website

<http://ga.water.usgs.gov/edu/watercycle.html> which has detailed descriptions of the Water Cycle in Polish (and other languages). Both pupils are then encouraged to write down the matching key terms and definitions into Polish and to bring these to the next homework club. The pupils are asked to make a judgement as to the detail or complexity of the description in Polish, judging whether it is easier or more difficult than the key visual they have labeled in English.

Strategies for teaching/learning EAL used in the lesson and how ICT supported/ enabled these.

The procedure outlined above is premised on the idea that thoughtful reading and thoughtful writing based on Internet research needs to be scaffolded. The aim is to help EAL learners organize Internet information, express knowledge in their own terms and

avoid both plagiarism of material and the printing off in bulk of large volumes of material related to the task the teacher has set.

The approach is based on extensive work carried out in ESL programmes in Vancouver, Canada, where there is a key focus is on the use of graphic organizers, or 'key visuals', used to show and help learners engage with the underlying knowledge structures of the content they are studying. By introducing a task note card, visual organizer and pre-selecting the sites to visit, learners are helped to produce less copied sentences and more reformulated and original sentences.

The procedure outlined in the original work from Vancouver is as follows:

Student Task Process Model

1. Read task note card and graphic expectations
2. Locate and read Internet information (provide the sites)
3. Select and record key notes into notebook
4. Translate and transform notes onto graphic
5. Write sentences with reference to note card and graphic.

- **activating prior knowledge:** sequencing the possible steps through one site
- **rich contextual background for comprehensible input:** Use of mother tongue (L1) in academic settings
- **comprehensible output:** Use of a key visual which supports both comprehension and production
- **relationship between form and function:** Sentence prompts to support the grammatical structure of the written work

Contributed by Manny Vazquez