

## Unit 2 Information and presentation

### About the unit

In this unit pupils use a variety of search mechanisms to explore the potential of ICT-based information sources. They research a topic and prepare a presentation for a specific audience. They use websites and CD-ROMs as their main sources.

They explore a range of types of information, such as statistics, legislation and advertising campaigns, and make judgements about the purpose of the information and the viewpoint of the organisation that produced it.

Pupils are given a framework for their research. They aim to answer specific questions and refine and organise their information as required.

The topic of the presentation is chosen by the teacher. It may be on any subject and could be controversial, but should be one that allows different interpretations and viewpoints.

This unit is expected to take approximately 5 hours.

### Where the unit fits in

This unit builds on unit 1 ‘Using ICT’ and the key stage 2 scheme of work, in particular unit 4A ‘Writing for different audiences’, unit 5B ‘Analysing data and asking questions: using complex searches’, unit 5C ‘Evaluating information, checking accuracy and questioning plausibility’ and unit 6D ‘Using the internet to search large databases and to interpret information’, with some links to unit 6A ‘Multimedia presentation’.

The unit provides a basis for pupils’ progression in the use of the internet in unit 8 ‘Public information systems’ and unit 9 ‘Publishing on the web’, and presentation packages in unit 7 ‘Measuring physical data’.

### Expectations

#### At the end of this unit

**most pupils will:** use ICT to search several sources to find information for specific purposes; select appropriate information, checking it for accuracy and bias; use ICT to structure, refine and communicate information; produce a presentation using more than one format, which shows that they are aware of the needs of their audience

**some pupils will not have made so much progress and will:** understand the need to frame questions carefully when selecting information; use a range of strategies to select material appropriate to their purpose and identify the source/originator; use ICT to present, structure and communicate information showing an awareness of audience, *eg produce a presentation in which key points of information have been transferred from research*

**some pupils will have progressed further and will:** develop and refine work using information from a variety of sources, *eg use complex search strategies while using a range of CD-ROM/internet sources to find material from different viewpoints and be critically selective in their choice of material, identifying the source and any bias or particular perspective*; present their ideas in a variety of ways and demonstrate a clear sense of audience, *eg rework information gathered to produce a personal presentation in which the information illustrates an awareness of audience and effective choice of resources for illustration*

### Language for learning

Through the activities in this unit pupils will be able to understand, use and spell correctly:

- index
- key word
- bias
- presentation package
- slide, slide show and transition
- animation

Reading – through the activities pupils could:

- make connections and links between different ways of presenting information
- use skimming, scanning, highlighting and note making as appropriate to different texts
- find information from material in different forms using contents pages, indexes, glossaries, key words and hotlinks
- follow the sequences of actions, processes or ideas being described

### Resources

Resources include:

- internet access
- a variety of websites, previously selected and marked, and CD-ROMs (from which text and images can be copied) with appropriate information
- word-processing software
- a presentation package including prepared templates so that pupils can combine their information quickly and effectively

Pupils should learn:

Pupils:

### Activity 1

- that information can have a range of sources that may reflect different views and may be incorrect or biased
- to spot connections and links between how information is presented in different forms
- Discuss the purpose of the exercise and the chosen topic, *eg to develop a presentation to explain to parents why the chosen issue is important*. Consider what sort of information and tone would be appropriate.
- Ask the class to consider the range of ICT-based information sources that might be available, *eg websites on the internet, CD-ROMs, exchanging information with other people via e-mail*. Discuss the purpose of these sources, *eg who might put the information on the internet or CD-ROM*, and how sources could contain different views on the topic, *eg the difference between a government's, industry and an environmental group's views*.
- Discuss the merits and disadvantages of the different search facilities, making lists with pupils and identifying what might make some sources less useful than others.
- Ask the pupils to make notes on the type of information each source might provide, *eg text, graphics, video*, and consider the limitations of each for the report.
- Using sites already bookmarked, demonstrate the methods of abstracting information and saving graphics and text rather than printing whole pages. Ensure that pupils know where they should save files so that they can be used for subsequent work.
- identify at least two appropriate but different sources and the issues associated with each source
- recognise the need to validate information sources
- The activities in this unit provide a vehicle for analysing and evaluating information and then presenting it in an effective manner for a specific audience. The approach provides a range of opportunities for differentiation at each stage, which include the:
  - number and range of the resources and search facilities investigated
  - level of detail in assessing the source
  - techniques for analysing the text found
  - content, material and design of the presentation
- Pupils may need a framework to help them compare advantages and disadvantages.
- Homework could include a questionnaire on opinions about the subject in the pupils' own homes/environment.

Pupils should learn:

Pupils:

### Activity 2

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| <ul style="list-style-type: none"> <li>• to use different methods for searching within sources</li> <li>• to find information using contents, indexes and key words and to use the results to modify a search strategy</li> </ul> | <ul style="list-style-type: none"> <li>• Discuss the different type of search mechanisms provided on CD-ROMs and within internet sites, eg <i>the hierarchical structure of a contents facility, site or content 'maps', key word searches, indexes, free-text and Boolean searches</i>. Ask the pupils to define the questions they would like to answer through their research.</li> <li>• Ask the pupils to investigate their chosen sources and to use the different facilities to find suitable information to answer their questions.</li> <li>• While the pupils are searching their sources, discuss the approach they have adopted to refine free-text searches and how they can use alternative words to find relevant information. Ask them to continue to search for material from the chosen sources, for their project, saving useful pieces of text and graphics.</li> </ul> | <ul style="list-style-type: none"> <li>• use a range of search mechanisms associated with sources and identify some of the advantages and disadvantages of the facilities</li> <li>• use AND or OR in their Boolean searches</li> <li>• modify searches after checking the relevance of material found</li> </ul> | <ul style="list-style-type: none"> <li>• Selection of resources is important to ensure a suitable range of search facilities is available for investigation. Web-based sources should be limited to preselected sites at this stage.</li> <li>• Pupils will need to question carefully what they find, before making an assumption about the success of their investigation.</li> <li>• Some pupils will need support when using Boolean search operators.</li> <li>• Homework could include an investigation of other ways of searching materials found in the home or library.</li> <li>• The activity could be extended to include using search engines to find further sources of information. Unit 10 'Information: reliability, validity and bias' addresses these techniques in greater detail.</li> </ul> |
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### Activity 3

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| <ul style="list-style-type: none"> <li>• that information may have unhelpful and biased viewpoints</li> <li>• to skim and sift information to identify any bias and perspective</li> <li>• to identify valuable information and organise and refine ideas using word-processing software</li> </ul> | <ul style="list-style-type: none"> <li>• Explain to pupils how to spot connections and links between different forms of information. Demonstrate the use of skimming, scanning, highlighting and note making as appropriate to different texts.</li> <li>• Ask pupils to record the source of their information, whether it is relevant and whether or not it supports the presentation they are developing, along with any specific data on a topic. Once the pupils have had time to complete a number of searches, the information gathered can be drawn together and they can identify the range of viewpoints and the different statistics. Ask them to discuss some of the reasons for the differences, eg <i>inaccuracies, different methods of calculation, bias</i>.</li> <li>• Once pupils have found and copied some text they think is useful, discuss the key message to be presented. Illustrate how to search for a key word in the word processor, and how to highlight key phrases or information and copy and paste/move material into an order that will be helpful for the presentation. Pupils can then continue to investigate their own material.</li> </ul> | <ul style="list-style-type: none"> <li>• skim through information to check its relevance</li> <li>• recognise that material held on ICT systems comes from a variety of sources and that they should identify the originator and evaluate the validity of the material</li> <li>• are critical of information selected and use techniques to search, identify and organise appropriate material</li> <li>• understand and interpret the relationship between pictures, print, etc</li> <li>• use organisational features to locate texts and information</li> </ul> | <ul style="list-style-type: none"> <li>• Pupils should be shown how to look for author details and be encouraged to discuss how they might identify bias.</li> <li>• A pro forma could be used to record important information about the source used.</li> <li>• Pupils should be encouraged to analyse material from ICT sources effectively to ensure relevant information is extracted for the task.</li> <li>• A framework of questions or headings can provide a structure to help pupils search for and collate information.</li> <li>• Homework could address a more detailed assessment of what the pupils have found and initial planning for their presentation.</li> </ul> |
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Pupils should learn:

Pupils:

#### Activity 4

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| <ul style="list-style-type: none"> <li>• to develop a presentation for a specified audience</li> <li>• to use the facilities of a presentation package to combine text, images and other material effectively</li> </ul> | <ul style="list-style-type: none"> <li>• Discuss with the class the audience and the amount of time and space the pupils have for each presentation, <i>eg the presentation must explain what the parents' role might be in relation to the chosen topic.</i></li> <li>• Ask the class how they could present their information, the reason for presenting the information to the audience and discuss the key messages. Illustrate and discuss the issues in producing effective presentations, <i>eg using images as a message and to enhance text, the importance of clear layout, the use of styles and sizes of font, spell checking.</i></li> </ul> | <ul style="list-style-type: none"> <li>• prepare a presentation to address the specified audience and to focus on the purpose of the presentation</li> <li>• use images, clip art and graphs to enhance a message or be more effective than text</li> <li>• use the facilities of a presentation package to produce an effective presentation</li> </ul> | <ul style="list-style-type: none"> <li>• Some pupils may need guidance on how to focus their activity, <i>eg make one point on a slide.</i></li> <li>• Pupils can be encouraged to review their presentation regularly.</li> <li>• More able pupils can be encouraged to think more carefully about the choice of design and layout of the presentation.</li> <li>• Pupils should be encouraged to make thoughtful decisions about the use of animated features of presentation packages, <i>eg using them for a specific reason.</i></li> </ul> |
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