• Always have a back up lesson plan with a series of activities.

Tips for effective searching...

- Use key words (generally more useful than phrases e.g. 'matter of fact' will often search for all occurrences of the three separate words.
- Check your spelling
- www.alltheweb.com and www.altavista.com are advanced search engines that allow you to refine your search. e.g.
 - 1. Use "quotation marks" to search for an exact phrase.
 - 2. + immediately before a word will force the reporting of any web pages containing that word. Conversely, and possibly more useful, –immediately before a word eliminates pages where that word occurs.
- Search engines such as **www.google.com** will simply ignore such operators (+, -, "...") but can offer increased speed.

You become much more effective and quicker in search techniques with practice.

Do share your ideas with colleagues and work in collaboration. Worksheets and lesson plans should be stored in folders in Teacher Resources.

Good websites to use:

www.becta.org.uk www.bbc.co.uk www.sitesforteachers.com www.angliacampus.com contribute.ngfl.gov.uk www.dfes.gov.uk www.ngfl.gov.uk vtc.ngfl.gov.uk www.thinkquest.org www.lessonplans.page.com www.nc.uk.net

Some Science specific sites offer a range of on-line activities www.wwf-learning.co.uk www.ase.org.uk

RECOMMENDED GOOD PRACTICE FOR USE OF THE INTERNET IN LESSONS

With the use of the Internet becoming more widespread, it is important for teachers to consider how such technologies can be best used to maximise learning. Hence the focus for this TIPS¹ project, funded by BPRS², was on the effective integration of the Internet into classroom practice.



Reasons for using the Internet

- Up to date information beyond that available in standard textbooks.
- Relevant and Motivational in colour, possibly animated with sound, attractive to specific types of learner.
- Student-Centred Students are able to work at there own pace.
- Differentiation Opportunities for individual targets / learning objectives in one lesson.
- Greater individual attention since students can work independently.
- Development of Generic Study Skills extracting and summarising relevant information.

The Internet is just another tool available to teachers that may be used as an alternative to other traditional resources to add variety to their teaching strategies and facilitate the development of independent study skills.



¹ TIPS – Technology Integrated Pedagogical Strategies

² BPRS – Best Practice Research Scholarship

Planning an Internet lesson

- Clear lesson objectives are required.
- Research appropriate sites.
- Make use of established sites for education
- Copying the URL³ (web address) and pasting it in to a word document creates a hyperlink.
- Keep an annotated record of possible sites.
- A good web site will have all the required information within 3 clicks of the mouse (limited hyperlinks).
- Build in differentiation different web pages, structure of questions, nature of tasks etc.
- Consideration of lesson structure. The teacher must be in control of student surfing. We suggest you that prescribe the activity and specific URL or use a structured worksheet.
- Do pay attention to the grouping of students and the number of computers available.
- The lesson must have a product e.g. poster, free writing, presentation etc.

Lesson Structure

- Evidence suggests that the best lessons have a clearly prescribed activity and specific URLs. This may be achieved by using a structured worksheet or by discussing the task with the class.
- If a worksheet is not being used, limit the number of websites to only one or two. A worksheet will allow more flexibility if many sites need to be accessed.
- Ensure that clear instructions are given to students about the site(s) they to visit and the information that they are to gather.

Worksheets

• Hard copy – errors can be made in typing in URLs.

echnical ability • Networked document – Live hyperlinks allow easy access to specified sites.

• Web page – Secure resource that students may not amend.

Introduction

- Use a hook that is *not* computer related.
- Set the big picture.
- Set the ground rules before students log in e.g. Permission must be sought for gaining access to sites other than those stated.
- Warn / explain about plagiarism. Information should be processed not simply copied, printed and presented!

Main Task(s)

- Student led with teacher in an advisory role.
- Circulate this is a good opportunity to talk to individual students, assess their progress and question their thinking.
- Monitor students closely either directly or remotely using 'NetOp School'⁴
- Encourage students to process information rather than to print huge reams. Cut and paste techniques are double edged... When used well they can save time but there is the potential for plagiarism and little learning.

Conclusion

- Ensure that students log off to allow time (minimum 10mins) for review and discussion of the lesson objectives.
- Check that the computers are left ready for the next lesson. e.g. all mice present / no damage!
- Possible opportunity for evaluation of the Internet over traditional resources.

Common Problems and Possible Solutions

- Prior to lesson check that all PCs are working, have mice, functioning key boards and check the Internet connection.
- Report any technical difficulties as early as possible; it may be possible to fix them!
- Obtain a temporary password from the ICT co-ordinator / Systems Administrator for any student who is unable to log-on.

Classroom Management

³ URL – uniform resource locator

⁴ See the ICT Coordinator or Systems Administrator for training.