The Internet



Schools participating in an eTwinning project explore the topic of cultural diversity by using the Internet to work together across national borders. Students and teachers research information on a wide range of Web sites and online encyclopaedias. They collaborate via email, discussion forums and video-conferencing with the intention of producing their own multimedia content - some of which may emphasise interactive elements, like podcasts, blogs and online quizzes.

What is the Internet?

The Internet is a worldwide system of computer networks, a network of big and small, in which users at any one computer can, if they have permission, get information from or communicate directly with any other computer. In fact, the term 'Internet' is derived from the idea of *inter*connected *net*works.

Using the Internet, students and teachers worldwide can source and exchange information speedily and economically, as well as communicate directly with each other. The Internet facilitates collaboration on projects between individuals and schools across the globe. The skills acquired by students during such projects prepare them for a future in which ICT is an integral component of their lives.

Using the Internet

Broadly speaking, there are three strands of Internet usage relevant to schools — it can be used to communicate with others, it can be used to source information, and it can be used to publish or share information. Some of the activities associated with these uses are outlined below.

Communication

- Electronic mail (e-mail)
- Discussion groups
- Internet 'chat' sessions
- Voice and video links
- Social networking sites
- Voice Over Internet Protocol calls (VoIP)

Information Retrieval

- World Wide Web (WWW)
- File Transfer Protocol (FTP)
- Social Bookmarks
- Really Simple Syndication (RSS)

Publishing of Information

- Web site development
- Weblogs (Blogs)
- Wikis
- Podcasts

Possible Educational Uses

One of the most compelling aspects of the Internet is the fact that it facilitates two-way information flow. This has opened up exciting new learning opportunities for schools by providing access to a seemingly limitless library of information and providing opportunities to work with others around the world. The following list outlines just some of the ways in which the Internet can be used to enhance learning and teaching:

- Use e-mail to communicate with other teachers and students
- Research and gather information using the World Wide Web
- Participate in collaborative school projects, both nationally and internationally
- Publish curriculum resources and school information online
- Join groups with shared goals, expectations and needs

- Work with mentors and subject matter experts
- Access professional development information and peer support for teachers
- · Promote links between students with special needs with similar disabilities/difficulties

World Wide Web

The World Wide Web (WWW) can be considered an interface for exploring the Internet. Its outstanding feature is hypertext, a method of instant cross-referencing. In most Web sites, certain words or phrases appear in text of a different colour from the rest; often this text is also underlined. When you click one of these words or phrases, you will be transferred to the site or page that is relevant to this word or phrase. Browsing the World Wide Web is done with a Web browser, the most popular of which are Microsoft Internet Explorer and Mozilla Firefox. The Web comprises millions of independently produced and publicly accessible pages of information (text, graphics, sounds, movies and animations) and, after e-mail, it is one of the most widely used parts of the Internet.

Resources found on the World Wide Web can be integrated into every area of learning and can act as a great motivator for students, encouraging independence and inventiveness. By using the Web, teachers and students can locate relevant information published by governments, universities, libraries, museums, galleries, private companies and other schools anywhere in the world, in addition to publishing their own information and curricular resources.

Electronic Mail

Electronic mail, or e-mail, is a communication tool that allows people around the world to send text (and non-text items) to each other in a matter of minutes. Communication by e-mail is probably the most pervasive and most compelling aspect of using the Internet.

E-mail can be distributed to lists of people as well as to individuals and this makes it a powerful online discussion tool. Parties interested in a particular subject can subscribe to a shared distribution list or newsletter by sending a request to the mailing list administrator. A mailing list that is administered automatically is called a list server. All messages sent to a mailing list are automatically forwarded to all the people registered on that list.

Web Log

A web log or "blog" is a website that acts as a personal online journal or one that provides news and commentary on a particular subject. It is made up of a series of postings usually consisting of short text articles written by a blogger (the writer of the blog) and appearing in chronological order. Blogs often include links to other blogs of interest, podcasts, videos music and photographs and are part of a wider social network. Usually they are intended for a public audience and facilitate interaction with its readers through the ability to submit comments and additional postings.

Internet Access Requirements

The teaching and learning potential of the Internet can only be realised if school computers are linked to the Internet. For the Internet to work successfully schools require bandwidth of a certain level. The Schools Broadband Network has been set up as a high quality network for schools providing always-on high speed access, in addition to a number of centrally managed services and a Service Desk. It is basically a controlled gateway to the Internet, providing content filtering, anti-virus protection and a firewall.

Internet Issues

All schools should develop a policy for acceptable use of the Internet. Please refer to Advice Sheet 24 (Internet Safety) for more information on this topic.

ScoilNet (www.scoilnet.ie)

ScoilNet is the portal for Irish education which provides an unrivalled resource to teachers and students through its dynamic library of curriculum-based educational materials. Resources referenced from Scoilnet are aimed at students, teachers, school managers and parents. These resources have been selected and reviewed by curriculum specialists and teachers. Further information on Scoilnet content may be found at www.scoilnet.ie

Relevant Web Sites

Wikipedia http://en.wikipedia.org/wiki/Internet Wikipedia, the free encyclopedia

Webopedia

www.webopedia.com/TERM/I/Internet.html

This is an online dictionary and search engine which provides summary definitions and descriptions of terms

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