



Internet applications, sites, trends and happenings

David Raitt

David.raitt@esa.int

This column aims to draw your attention to various interesting Web sites which I have come across and which might appeal to you, and to keep you up to date with news and views on Web trends and developments. It offers essentially a personal selection rather than comprehensive coverage.

Online newspapers - from free to fee

I haven't bought a daily newspaper for donkey's years - I always thought it was a waste of money with all its gossip-type news - and when I had the alternative of radio or TV. But when newspapers became available on the Web, it was a different matter. The first thing I would do when I arrived at the office would be to browse a couple of newspapers or news sites - the *Daily Telegraph* or CNN. The *Daily Telegraph* was the first daily newspaper to go online in 1994 and was an immediate success - users had to subscribe, but it was free and provided the major news without all the scurrilous space-fillers in the printed version. The company had a staff of over 20 people working on the Web site (<http://www.telegraph.co.uk>) and I could never understand how they were able to do all this for free - and I took advantage and became one of their readers. Other daily newspapers followed suit - the *Times*, the *Guardian*, the *New York Times*, *International Herald Tribune*, *Financial Times*, *Wall Street Journal* and many more, including news magazines such as *Time*.

Some, such as the *New York Times* (<http://www.nytimes.com>), required users to pay a nominal fee at first, but soon abandoned this policy because it feared that charges would drive away readers. It was hoped that by not charging for the online version, readers would get hooked on a paper and subscribe to the print version - but this has not happened and most electronic readers never see the printed copy. Around half of the users of the *Guardian's* Web site (<http://www.guardian.co.uk>) do not buy the paper - though it is recognized that people visiting the Web site are at least trying out the paper. In any event, the majority of people, like myself, just want a quick overview - the headlines - of what is happening in the world, at home, in sport or whatever.

Now it seems that newspaper companies are contemplating charging for access to parts of their sites in an attempt to recuperate some of the millions of pounds they have put into their development with little reward. Pearson, the media group owning the *Financial Times*, for instance, spent nearly £115 million on its loss-making venture FT.com (<http://www.ft.com>) last year - although this is expected to break-even this year. The *Wall Street Journal*, launched in 1996, has nearly 60000 paying subscribers two thirds of whom do not look at the print version - but the Web site (<http://www.wsj.com>) is still not profitable. There are differences in approaches between the USA and the UK. For instance, 90% of the *Wall Street Journal's* 1.8 million readers pay to have the newspaper delivered to their homes, whereas the majority of the *Financial Times* 0.5 million readers buy it at a newsagents.

However, it is generally accepted that charging for the whole newspaper online will not be viable in the short-term and thus only certain value-added content would be charged for like archives, collection of information and in-depth research analyses. On the other hand, this has not always worked where it has been tried. FT.com abandoned charges for complex searches of its archive when users chose to access the free, less-advanced search service instead. Other revenue streams will probably be opened instead, such as mobile access and chat sessions with reporters. But it remains to be seen whether these produce the big bucks that newspaper companies need - after all, making adverts available on the Web sites pages to increase revenue has not been successful. Read more about it in the *Daily Telegraph's* Connected supplement for 26 July 2001 at <http://www.telegraph.co.uk/connected>.

Trapping spies

In a previous article, I've written about cookies that are deposited on your system and software (e.g. Doubleclick) which keeps track of what adverts you might click when visiting a Web site. Other annoying packages do this when you download a product they offer (e.g. Comet Cursors or Gator) for free. A software package which can help you clear out these spying files from your system is Ad-aware (<http://www.lavasoftusa.com/aaw.html>). This award winning, free multi-spyware removal utility scans your computer's memory, registry and hard drives for known spyware (advertising systems) components and lets you remove them safely.

Advertising systems detected by Ad-aware 5.6 include: Adware, Alexa, Aureate, Comet Cursor, Cydoor, Doubleclick, DSSAgent, EverAd, EzUla, Expedioware, Flyswat, Gator, Hotbar, OnFlow, NewDotNet, TimeSink, Web3000, Webhancer.

The list is updated regularly. Many options like scanning depth or automatic modes can be set in the preferences menu.

Ad-aware features an easy to use, wizard-style interface which guides you through the scanning and removal process. New features in Ad-aware 5 include backup/restore functionality, excluding of selected components, multi-language support, shell integration, highly improved user interface, among other things.

New version of meta search engine

The latest version of the desktop search tool, Copernic 2001 Basic has recently been released and can be downloaded from <http://www.copernic.com/index.html>. This free version targets scores of information sources and provides relevant, valid results in seconds. Copernic 2001 Basic gives one-click access to the best search engines on the Internet, such as AltaVista, Excite, HotBot, Infoseek, Lycos, WebCrawler and Yahoo!. Copernic 2001 Basic has a ranking method that places the most relevant result at the top of a result report generated in seconds and free of duplicates. Furthermore, it is claimed that with Copernic 2001 Basic searches and updates are carried out quickly so that you can spend more time browsing and less time searching.

Copernic 2001 Basic is a one-step search solution that queries over 80 of the best information sources on the Internet grouped into 7 categories including the Web, newsgroups, buy books, hardware and software. Considered one of the easiest-to-use Internet meta-search tools, Copernic 2001 Basic includes a quick search bar in addition to the existing search wizard. Copernic 2001 Basic also provides document previews of result Web pages helping the user to determine the relevancy of results before browsing

through them. Another 'first' available with Copernic 2001 Basic is translate buttons added

in toolbars to provide quick access to an online translation service in order to translate any Web page or search result into any of seven languages: English, French, German, Italian, Japanese, Portuguese and Spanish.

Copernic 2001 also comes in a Plus version (\$39.95) which includes all the features of the basic version as well as providing access to more than 1000 search engines (I had no idea there were so many!), 93 specialized search categories, and no advertising banners. The Pro version (\$79.95) includes all the features of Copernic 2001 Plus and in addition the possibility to carry out automatic refine, automatic validation, scheduled search updates, e-mail notification of new documents found and query spell-checker.

Emerging Web-based technologies make learning and teaching more accessible

The World-Wide Web is revolutionizing the way educators teach and students learn. As the Web becomes more of a focus in education, the development and use of emerging technologies are fast becoming fields of much interest.

Anil Aggarwal is a Lockheed Martin Research professor in the Merrick School of Business at the University of Baltimore in the USA. His current research interests include Web-based teaching, model-based organizational systems and educational issues in MIS. He shares his expertise on how emerging technologies are changing the face of education in the following interview.

Q. How is the Web affecting learning and teaching?

A. During the past two decades, telecommunication technologies combined with Web-enabled technologies have created a new area of learning known as 'Web-based learning and teaching technologies'. This new discipline is changing the very concept of education around the world. Colleges and universities of all sizes are facing many challenges and opportunities offered by this new technology-based concept.

Q. What are some of the problems facing this emerging field?

A. Like any emerging field, 'Web-based learning and teaching technologies' is not free of problems, controversies and challenges. Many are questioning the viability of this technology and its suitability in educational delivery. Therefore, it is crucial for educators and trainers to constantly enhance their understanding of the issues, trends and opportunities associated with Web-based learning and its related technologies and their impact on educational systems, programmes and the education profession itself.

Q. How is Web-based learning changing the nature of education?

A. Web-based learning is in its infancy and is still evolving from correspondence courses to distant learning to Web-based learning. The basic concept of learning has not changed - only the medium is different. Like e-commerce, e-education is becoming 'customer' oriented. Many for-profit universities are forcing traditional universities to focus on the 'customer', that is, the student. The mode of delivery is changing in that institutions are taking education to the customer instead of the customer coming to campus to learn. Education is becoming time, place, language, distance and status independent. More and more students are looking for convenience and taking control of the learning process. This creates a completely new learning environment. Expectations and interaction among students, faculty and administration are changing.

Q. What is the current status of Web-based learning?

A. There are different learning environments and different Web teaching models. For Web-based education to be successful, traditional methods must be adjusted in the areas of student evaluation, faculty and student training and expectations. Some of the fundamental requirements for success are sufficient funding, strong technical infrastructure, good design and interfaces, operations and maintenance.

Q. How is Web-based education different in less developed countries?

A. For Web-based education issues in Third World countries, the lack of resources and telecommunications infrastructure are two main barriers. Academics must find new ways of using the Web, such as producing Web-based lessons on a CD and using the Web for enhancement purposes. In addition, academic in Third World countries need to help to create an argument for outside funding for needed computer resources and infrastructure.

Q. How can Web-enabling technologies be used to develop Web-based lectures?

A. Web-enabling hardware and software technologies need to be used, and guidance is necessary in their selection in a specific teaching environment. There is a model that can guide academics in the software selection process for collaborative learning. The model describes the teaching and learning activities, provides a step-by-step guide and illustrates the selection process using a case study.

Q. What are some of other issues involved in the use of Web-based teaching and learning?

A. The human-computer interface in Web-based courses is important. Navigation alone is not sufficient in a Web-based course and new navigation aids must be incorporated in the browser itself. NESTOR, a Web browser, provides an interactive learning environment where a learner's expertise is deployed in navigation. NESTOR incorporates a constructivist approach to Web navigation. It allows students to create a compound document, which is more meaningful to them.

Q. What kind of pedagogical changes are needed to translate traditional education to Web-based education?

A. Web-based education is changing the very nature of education. Cooperative learning, where students initiate and to some extent control learning, is becoming a more effective way of teaching on the Web. This requires changes in the traditional teaching environment. Student assessment is probably the single most important issue in teaching. Traditional exams and classroom monitoring are not feasible or even desirable in Web-based learning. New methods need to be incorporated to test student learning and assessment. In addition, faculty need to be trained to provide on-line lectures. Simply transferring class notes to Web is not the answer.

Q. What kinds of tools are commercially available for use in developing Web-based educational assistance?

A. By using Common Gateway Interface (CGI) and JavaScript technology instructors can develop their own Web-based testing tools. Many issues like the security of Web-based teaching, student identification, plagiarism, and data manipulation and analysis are also important.

Q. How does managing assignments differ with Web-based courses?

A. The structure and functioning of the assignment management system is different. This

involves collection, authentication, grading and distribution of assignments. A creation of an 'assignment box' with authorized access through a standard Web browser can be useful.

Q. *What special accommodations need to be made for faculty training?*

A. There are three basic areas, namely training structure, pedagogical support and faculty support, to prepare faculty to use on-line resources successfully. Training focus should not only be on training faculty with skills to use a tool but also the pedagogical underpinning for the effective use of the tool.

Q. *What criteria are necessary for successful implementation of Web-based learning?*

A. Like any other emerging discipline, there are no established theories and many concepts are emerging through field experiments and classroom studies. Web-enabling technologies can be used in a programming course. Technology can be used effectively in a programming class, namely C++. Successful implementation of Web-based support requires attention to detail such as creating and maintaining Web contents, administering server resources and specific Web standards and software.

Q. *How should use of the Web be included in course assessments?*

A. A field study in the use of a Web-based learning tool showed that repeated use of the Web-based supplement was correlated with better overall performance in the class. Lack of Web site usage in certain sections led to a conclusion that using Web in class and making Web assignment part of student's grade may impact the use of a course Web site.

Dr Aggarwal's recent book, *Web Based Learning and Teaching Technologies: Opportunities and Challenges*, is available from Idea Group Publishing, Hershey, PA (300 pages, 2000, ISBN: 1-878289-60-8, <http://www.idea-group.com>).

Disclaimer

Articles published in SAJIM are the opinions of the authors and do not necessarily reflect the opinion of the Editor, Board, Publisher, Webmaster or the Rand Afrikaans University. The user hereby waives any claim he/she/they may have or acquire against the publisher, its suppliers, licensees and sub licensees and indemnifies all said persons from any claims, lawsuits, proceedings, costs, special, incidental, consequential or indirect damages, including damages for loss of profits, loss of business or downtime arising out of or relating to the user's use of the Website.

ISSN 1560-683X

Published by [InterWord Communications](#) for the Centre for Research in Web-based Applications, Rand Afrikaans University

