Education for Information 13 (1995) 171–175
IOS Press

Guest Editorial

Education for Information and the Internet

General enthusiasm for the Internet has reached almost plague proportions in the press and other popular communications media and can be dated, approximately, to Al Gore's announcement of the "information superhighway"[1] and to the emergence of the World Wide Web[2] and its associated browser, Mosaic[3] (followed rapidly by Netscape[4], AIR Mosaic[5], InternetWorks[6] and others). Newspaper articles are devoted to the subject (and some of them are published on the Internet itself), new magazines are born in profusion, conferences selling the idea of doing business on the Internet are held, and this year has seen the fifth conference[7] on the World Wide Web, held at Darmstadt, Germany.

Naturally, the world of information as we know it has not been exempt from all of this activity. Professional journals and professional conferences deal with the subject, short courses blossom across the land, and curious symbol strings, beginning "http://", are added to business cards and e-mail signatures.

Clearly (or, perhaps, not so clearly), we are experiencing the beginnings of major developments in communication and this issue of *Education for Information* is designed to establish what impact the Internet is having on education, and what impact information educators are having on the Internet. From even a cursory examination of Internet activity in the LIS field, it is clear that it is being used in different ways for educational purposes.

Progress is such that we can now expect that any student in any department of information studies that has access to the Internet, will be taught about what it is and what it does. Certainly, in the UK, a recent study[8] showed that all of the schools and departments of library and information studies were "network aware" and, by the end of 1995, all were delivering training in this area.

Many departments are giving all students e-mail addresses so that they can communicate across campus networks, with their colleagues and their teachers and, through the academic network, to students and others around the world. The recent establishment of

[1]http://ntiaunix1.ntia.doc.gov:70/0/papers/documents/nii_agenda_for_action.txt
[2]http://www.w3.org/
[3]http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/NCSAMosaicHome.html
[4]http://home.netscape.com
[5]http://www.spry.com/
[6]http://www.booklink.com/
[7]http://www.igd.fhg.de/www/www95/www95.html
[8]http://info.lut.ac.uk/departments/dils/cti/Newsletters/v5i6a4.html

0167-8329/95/$03.50

the students' and intending students' mailing list, LISSPS[9], is an illustration of eagerness with which the concept is being taken up.

The development of the Web has also given some departments an opportunity to develop a strong Internet presence. There is a list of these in my own Web pages at Sheffield[10]. These Web pages carry a wide variety of information including course descriptions, notes on research projects, CVs of research students, links to other useful Internet resources, and more.

Naturally, the development of the WWW as the main navigation tool for the Internet has resulted in some departments developing student project work and placing it on the Web. Good examples of these can be found at Sheffield University[11] and, in the USA, at North Carolina[12] and Michigan[13].

It is a short step from developing Web pages to some form of electronic publishing over the Internet. In essence, any Web page at all is a "publication" in the dictionary sense and the distinction between communication and publication is becoming more and more blurred. However, in some cases, some form of "electronic journal" is being produced and either being made freely available over the Internet (e.g., *Information Research*[14] from Sheffield or *Communicator*[15] produced by students at Michigan) or, for priced publications, having contents lists and abstracts presented (e.g., *Internet Research*[16], with pages on the University of Texas at Austin server). Recently, pages for *Library Quarterly*[17] have been established by the Editor at the UCLA site. You will find an extensive list of electronic journals and mailing lists in the field of librarianship at the University of Houston[18], with journals ranging from the *Newsletter on Serials Pricing Issues* to the *Electronic Journal on Virtual Culture*.

A few more short steps take us to the delivery of courses by e-mail and perhaps the best known of these is the *Roadmap*[19] network training workshop:

> '*Roadmap* is an Internet training workshop designed to teach new "Net travelers" how to travel around the rapidly expanding (and often times confusing) "Information Superhighway" without getting lost.' (*Roadmap*: Usage guidelines)

The author of *Roadmap*, Patrick Crispen comments in the Guidelines that,

> 'Never in my wildest dreams did I expect that over 62,000 people from 77 countries would sign up for the first three *Roadmap* workshops.'

[9]LISSPS@Mailbase.ac.uk
[10]http://www.shef.ac.uk/uni/academic/I-M/is/lecturer/tom2a.html
[11]http://www.shef.ac.uk/uni/academic/I-M/is/studwork/studwork.htm
[12]http://ils.unc.edu/ilshome.html
[13]http://http2.sils.umich.edu/
[14]http://www.shef.ac.uk/uni/academic/I-M/is/lecturer/infres.html
[15]http://http2.sils.umich.edu/ILSSA/HomePage.html
[16]http://volvo.gslis.utexas.edu/~IRjrnl/IR_home.html
[17]http://www.gslis.ucla.edu:70/LIS/www/lq/lq.html
[18]gopher://info.lib.uh.edu:70 /00/tools/netinfo/library
[19]Patrick Douglas Crispen 'pcrispe1@ua1vm.ua.edu'

Another example of a Net-delivered distance-learning programme comes from Dan Baron[20] at the University of South Carolina:

> 'We are teaching a full masters for 150+ students in Maine. I taught the first course and had two students who sent in all assignments via the net. We have listservs for each class – a gopher – working on a web page.'

Courses are also to be found on Web pages: for example, the Honolulu Community College of the University of Hawaii, has *ISS 101 – Internet survival skills*[21], which has modules on the various tools of the Internet (gopher, Veronica, ftp, etc.) along with Web links to external resources and other materials available at the University of Hawaii, such as their *Entering the World Wide Web: a guide to Cyberspace*[22]. Lou Rosenfeld[23] suggest that the course run by himself and Joe Janes (Internet Resources Discovery, Organization, and Design[24]) was:

> '...the first regular course to be taught that deals with the Internet as an information environment (as opposed to as a technology). Our students are taught not just basic Internet tool skills, but also a broader "gestalt" that integrates the many aspects of librarianship (using automated tools to browse and search, and asking experts). This gestalt stays fresh regardless of the many changes Internet and its tools undergo, and also enables the students to create high-quality topical Internet guides (their term projects), which are then published here at UM's Clearinghouse for Subject-Oriented Internet Resource Guides. Many of our students have parlayed these skills into both new and traditional employment.'

Course descriptions of all kinds are also available on the servers of most academic institutions, either in the form of gopher files, or on the World Wide Web. A guide to these has been prepared by at the University of Texas, under the heading of the World Lecture-hall[25].

Academic staff and research students in departments of information studies are making known their publications, often with abstracts, and sometimes the entire publication. Presumably the latter is not encouraged by the print publishers, but I received approval from the Editor to put this Editorial on the Web[26]. If you are new to the Internet and the Web, you will find that the hypertext links to other sources of information puts Web publication into an entirely different dimension from print.

These might be described as dissemination activities on the Internet, but "cyberspace" is also being used to carry out research. Sometimes research on the activities that are going on, and on the role of electronic communication in various spheres, but also on other issues – so much so that the Heads of Departments and Schools Committee of BAILER has recently issued a Code of Practice in the use of e-mail questionaires. As an

[20]gopher://129.252.62.88:70/00c%3A%5Cdept%5Cfaculty%5C030.txt
[21]http://kawika.hcc.hawaii.edu/iss101/iss101.html
[22]http://www.hcc.hawaii.edu/guide/www.guide.html
[23]http://sils.umich.edu/~lou/60694.html
[24]http://http2.sils.umich.edu/~lou/60694.html
[25]http://www.utexas.edu/world/lecture/
[26]http://www.shef.ac.uk/uni/academic/I-M/is/lecturer/efori.htm

example of a serious research use of the Net, in response to a call for information for this editorial, Elizabeth Hewins, a Ph.D. student at the University of Texas at Austin, reported that (in a study of the impact on information on veterinary decision making):

> 'My major concern was trying to identify a sufficient sample size for my survey [and] to establish a sample group, I identified several appropriate news-groups and Listservs and sent messages asking for participants. So far, my committee is OK with this approach to gathering a non-random sample. I am also monitoring the veterinary informatics Listserv for issues that are important to my research, and am routinely checking several veterinary informatics web sites.'

Of course, it is not only the information field that has seized upon the Internet as a means of communication and knowledge distribution. Educators in general are also very active. A good starting point for assessing the impact in the USA are the *On the Horizon*[27] pages at the University of North Carolina, Chapel Hill. The guide to educational resources on the Internet[28] is a particularly useful page. Charles Sturt University in Australia also maintains a good resource guide to education in general[29].

In the UK, university administrators have recently established a guide to education resources, world-wide, on the Web[30] and Section K of BUBL is a guide to LIS education, including network exercises[31].

Government is also attracted to the Internet. The US government leads, as you might expect, and the US Department of Education pages are very well developed[32]. The information on the US educational technology initiative is particularly relevant[33]. The UK government has some pages run by the CCTA[34], where the Department for Education[35] can be found and the Scottish Department of Education has pages mounted on the Edinburgh University server[36].

Given the developments outlined above, and the initiatives described in the papers that follow, it is clear that many aspects of education for information are likely to be transformed in the very immediate future. What directions those transformations will take is impossible to know, and whether the more radical suggestions of the Internet enthusiasts (such as the disappearance of higher education institutions and their replacement by a global "cyberversity") will come about is very uncertain. However, change is afoot and those of us in the education sector of the information professions will ignore it at our peril.

[27]http://sunsite.unc.edu:80/horizon/
[28]http://sunsite.unc.edu:80/horizon/ pointers.html
[29]http://www.csu. edu.au/education/library.html
[30]http://nisp.ncl.ac.uk/juga/
[31]gopher://ukoln.bath.ac.uk:7070/11/BUBL_Main_Menu/K
[32]http://www.ed.gov:80/
[33]http://www.ed.gov:80/techno.html
[34]http://www.open.gov.uk/
[35]http://www.open.gov.uk/dfe/dfehome.htm
[36]http://www.ed. ac.uk:80/~riu/

Please keep me posted of any new developments by e-mailing to T.D.Wilson@Sheffield.ac.uk

Tom Wilson[37]
University of Sheffield
Guest Editor

[37]http://www.shef.ac.uk/uni/academic/I-M/is home.html