

Editorial

JLO on the World Wide Web: Why?

The Internet and its subsidiary the World Wide Web, have been the subjects of countless column inches in the last few years, and there is no doubt that the popularity of the Web continues apace. Hundreds of web sites are added to the Internet each week and the number of users world wide is now estimated to be over 115.75 million (www.nua.com). Such growth also has enormous economic implications with suggestions that internet commerce is expected to quadruple from \$124bn this year to \$518bn by the year 2002 (*Financial Times*, June 27/28th, 1998). This frenetic growth, and the ongoing bombardment of statistics and announcements that accompanies it, has served to generate much comment, and it is this – together with the knowledge that competitors are developing expertise in this area – which appears to have been the catalyst for many organizations to try and develop an internet presence. However, this impetuous rush has had a price, for the quality of sites in many major fields of interest – both academic and business – is often poor. Many organizations seem to regard a web site as being merely an advertising banner or an extension of traditional print-based media replicating the organization's printed publications. They overlook the fact that the Internet is, by its nature, a medium readers use to access information.

In April 1998 the JLO web site was re-launched after consultation between the Editors, the Publishers and a team of web site developers specializing in interactive system design and human-computer interaction. The main concern was to develop a site that would be useful to the readers of the paper-based journal and would act to add value for research workers in academic communities around the world by providing services not easy to accommodate with a paper-based publication. This short article identifies the main goals of the web site and outlines some of the new features as well as explaining the rationale behind the design. It also touches on a number of ideas the Editors and the Publishers are discussing, to take advantage of future developments in information technology so that the 'e-JLO' (electronic JLO) can evolve in a manner which will provide a useful adjunct to the paper-based journal.

Web site goals

Plato viewed the written word as both too rigid and too free realizing that, in outlining a logical exposition, the author can never be sure that the reader follows the path in the way that was intended by the author (Bolter, 1991). In other words, paper-

based messages (however well designed), have the disadvantage that they are essentially inert, denying the reader the full participation experienced in dialogue. Organizational control resides with the author and with the conventions of print-based medium. In contrast, electronic communication has the potential to allow users to exert a degree of control and flexibility in their use of the media and this ability to interact, together with the speed of access inherent in electronic media, facilitates feedback as well as the gathering and collating of information. However, all too often readers are disappointed with electronic media. This may be because the demands for organizational control and high levels of interactive flexibility have been ignored due to poor design or because the somewhat restrictive nature of a print-based medium is simply mimicked in the electronic version. The latter problem is common but is an error, for merely presenting the paper-based document in an electronic medium often serves to make it less usable, efficient, or readable than the equivalent paper-based journal. The user can get lost, take too long to find the information or find it difficult to decide where to look next in the system. Therefore, a web site should be designed with an understanding of these problems and with a perception of the needs of its key audience; how they get their information from various resources, what information they need, for what purposes the text is used and how the web site can be optimized to disseminate the information in an electronic format.

These concerns underlie the main goals we have set for the e-JLO and we have tried to deliver a usable electronic information source that can meet the needs of readers of the paper-based journal. To address the many requirements of a large and sophisticated international audience in full is, of course, difficult and what we have designed is based on what past experience has suggested is most likely to be of use. We have ended the present round of development by giving readers up to date information on the JLO's activities coupled with facilities to access the journal's current contents – including a full text feature article – as well as an abstracts archive which allows users to search for material from back issues of the Journal. We have also provided facilities to acquire individual articles or order the JLO or many of its related publications on-line, via fax, telephone or conventional mail. These features support and extend all the facilities of the paper-based journal without replicating them.

Design rationale – how useful are the JLO web pages?

The basic design is centred on helping users to find information quickly while minimizing the number of links (trying to avoid the 'lost in hyperspace phenomenon'; Elm and Woods, 1985). This site was also designed to support various reading strategies (skim reading, browsing, jump sections, read chunks of text, 'flip' pages etc.). The following section briefly explains the individual web pages we have included.

The web pages

The first page. The first web page comprises the title of the web site and a number of main menu selection bars. These selection bars remain constant in each page of the site ensuring that readers can always navigate the site efficiently.

What's new page. This page reports on any news and events which will be of interest to the research community and that Editors feel would be of interest to the readership (new developments in the speciality, seminars, awards, press releases, change of instructions, editorials, etc.)

Current issue page. This page includes an interactive contents page with links to articles that have been published in the current issue. The same part of the site includes one full text feature article which can be read on-line. The main section titles of the feature article are listed, giving readers the flexibility to skim read the article by clicking on the section headings in any order. The article can also be printed. The other contents titles give the title and author(s) and perhaps a short description of the article and, if the reader is interested he or she can find the abstract in the abstract search page or order the article electronically or by fax/phone or mail from the Order form page.

Abstract search page. At present abstracts from December 1996 to date can be accessed via the Internet. A topic search has been developed to search the abstract archives via key words. The Publishers will be adding each current month to the database and also adding back issues on a monthly basis. The Editors plan to archive abstracts back to 1994 in due course.

Contact page. This page was designed to allow readers to play an active part in telling the Editors what they would like to see in the future editions of the e-JLO and to contact them about any specific requests in relation to the JLO and to register as a regular user. Every few months the Editors will be adding new questions to the questionnaire asking readers about ideas in developing the web site. You are encouraged to answer these questions as they are designed for reader participation. If you have an idea or if you are not happy with some aspect of the current site then you should let the Editors know your views and ideas. It is only in this way that the site can develop to mirror the needs of the readership.

Order form page. This page is designed to allow readers to order any article from the current or past Journals, order the whole journal or take out a regular subscription. Also included are a number of additional related publications which can be ordered.

This order page is hosted on a secure server and readers should not worry about putting their credit card number on this form – it is more secure than ordering via telephone or giving a credit card in a shop or restaurant. Each publication on this page is an active link and, if the reader double clicks on the link, the price and short description of the publication is listed in the lower frame. If a reader is not happy about sending credit card details, there is the option of completing the form and either faxing it or sending the order through to the Publishers.

Calendar page. This web page contains a straightforward list of events and includes links for directly e-mailing specific individuals from within the web site.

Submitting articles page. Recently the instructions to authors has changed (as reported in the *What's new page*). This page has complete instructions for submitting authors. They are, of course, the same as those which are printed in the paper journal.

Advertising. Each page has a space under the main menu for advertising. As readers appreciate, advertising in the printed medium can have advantages if targeted towards leading and well-respected industry journals. Similarly, as the Internet reaches larger and larger audiences around the world, these benefits are replicated and often enhanced through carefully targeted web-based advertising. The advertising space has been designed so that it is well sighted on the main page, but it does not get in the way of reading or slowing down the system and should not interfere with reader's ability to skim read.

What would you like to see on the e-JLO web site in the future and what have we in mind to develop?

We believe that the electronic format of the JLO has exciting possibilities for the future. For example we would like to see the development of a 'How I do it' section with short video clips of surgical procedures on the web. The Journal has never had such a section and to have this on-line seems particularly appealing since descriptions of surgical techniques on paper cannot possibly be as useful as viewing a video of the procedure. However, to do this requires that some users would have to download software (for a small fee) that would support video clips. It is only from your feedback that we will be able to ascertain whether there would be demand for such a service and whether there would be sufficient numbers of potential users to justify the cost of providing it.

There are a number of other developments that we could include that may have advantages for training. For example, the publication of digests of conferences or courses has the potential to reduce training costs and provide essential information to people who were unable to participate or attend. Another example might be the use of slide show presentations with audio or textual explanations and comments from a panel of experts. We could also expand in the future by adding monthly forums, panel discussions, access to the experts via e-mail or

even by providing the whole journal on-line for an 'electronic subscription'. All of these facilities are possible using current technology.

To summarize, presenting the JLO in an electronic medium allows for another form of communication between authors and readers. The e-JLO is trying to engage you, the reader, by inviting you to use the abstract search, by submitting the contact form, by asking you to state your views or questions in the comments box and by completing the questionnaires. We would like your suggestions and opinions and will try and respond to them. Only in this way will our service develop and expand to suit your needs.

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References

- Bolter, J. D. (1991) *Writing space: The Computer, Hypertext and the History of Writing*. Erlbaum, Hillsdale, N.J.
- Elm, W. C., Woods, D. D. (1985) Getting lost: A case study in interface design. *Proceedings of the Human Factors Society - 29th Annual Meeting*, pp 927-930.

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