

FREE ELECTRONIC SCHOLARLY JOURNALS: A STUDY

By

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ABSTRACT

From the early 90's, the pool of free scholarly electronic journals has increased considerably. Electronic Journals in Scholarly setting continue a tradition of creation and dissemination of knowledge that has begun long ago on Print Journals. The attitude and publishing habits of researchers have changed. Amidst the furore of serial price increase, the steady growth of scholarly journals freely available in electronic form is worth noticing. Most editors and publishers agree that the research findings should be made widely available to all, and the internet is capable of doing just that. This paper tends to look at some of the aspects of free scholarly journals, their availability, impact on the scientific community and resource links.

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0. Introduction

Information underpins the learning, research and debate that drive research forward. Access to information is essential for describing and understanding the deficiencies of the present, building visions of a better future, developing practical ways to achieve these vision. Validation and distribution of academic knowledge is primarily based on peer-review publication.

There have been astounding developments and widespread adoption by many segments of society over the past few years in our ability to move and manage information. We have been told that we live in "The Information Age" for some time now, but it has truly been the explosive growth of the global computer network known as the Internet that has brought this somewhat tired phrase home to many. What began as an exclusive network for academics and military installations has blossomed into a unique public communication and publishing medium used by millions of people around the world everyday.

The electronic revolution is narrowing the gap of information. The power of web technology lies in the ability to redefine research reporting and transform the nature of scholarly communication in ways not feasible in traditional print media. Increasingly, the Internet provides enhanced opportunities for visual, audio and video interactivity. The potential to incorporate features that advance or surpass those traditionally used in print journals is yet to be realized by authors and publishers of E-journals. In their early development there had been a tradition of creating/offering free access to e-journals, perhaps taking advantage of the lower production costs of e-distribution. It also frees the

users from limitations, for example size limitations that are heavily imposed by high print cost.

1. Definition of free scholarly journal

Although it might seem that *"everybody knows what an electronic journal is,"* editors and librarians have not reached consensus in their definitions or classification of electronic periodicals. An early definition described electronic journals as "any serials produced, published, and distributed. . . via electronic networks. Later descriptions distinguished between electronic journals available only electronically and electronic editions of journals available both in print and electronically; and among types of electronic journals, such as online, CD-ROM and networked journals.

A journal is referred to be "*free*" journal, when access to the journal is not dependent on a subscription or membership in an organization. *Scholarly* is defined to be peer-reviewed and with a scholarly treatment. Functionally, a journal, whose articles contain references is said to have scholarly treatment. '*Electronic Journal*' includes both online only journal and also journals, which have a print counterpart. The restrictions made for a journal to be considered electronic is that the online version contains equal context as the print publication, published earlier or simultaneously.

In an academic environment scholarly communications is a critical component of generation of knowledge. It is important to know what other researchers in your discipline are doing so as to improve your professional and academic efforts and to avoid duplicating theirs. Hence, scholars generally want access to a broad range of academic journals demand to publish in a scholarly journal is high, since these are highly read and visible amongst the community of academicians and researchers.

Although electronic journals (or e-journals) have been under development since 1976 e-journals in their non-experimental phase did not begin until the 1990s, with a few exceptions. The first peer-reviewed electronic, full-text e-journal including graphics was Online Journal of Current Clinical Trials (OJCCT). It is estimated that there are more than 150 scholarly, peer-reviewed e-journals in Science, Technology and Medicine and equal number in the Humanities and Social Sciences. These can be said to be the first generation of electronic journals, with more revolution yet to come into this field.

2. Initiatives

The appearance of PubMed Central, BioMed Central and eprint servers at the Lancet and BMJ have made it possible to bring to the notice of the world the research findings. Few such repositories are:

BioMed Central (www.biomedcentral.com), access to primary research articles published in Bio Med Central is free to all. BioMed Central is a repository for digitized articles from UK's Current Science Group (CSG) has print journals, and also aims to publish peer-reviewed, online only biomed journals. The online journals will permit the

authors to retain the copyrights of their works, in contrast to print journals, which retain copyright for themselves and thus benefit from sales of articles reprint.

PubMed Central (<http://www.pubmedcentral.nih.gov/>) aims to be a secure central representative for research articles. Peer-reviewed journals provide their original research articles, usually a month after publication.

Mathematics e-Print Archive (<http://front.math.ucdavis.edu/>) is a potential source of preprint and e-print archives. The archive at Los Alamos National Labs is a comprehensive archive of e-prints in mathematics. The author, title, and abstract information are searchable, and the citations are given for papers that have subsequently been published, but there are no links, as yet, to the published versions of the papers. An e-mail list of the users of the research community is maintained and they are notified of any new papers in the area of their interest.

Math-Net Link (<http://www.math-net.de/links/>) This is a collection of mathematical resources and related links into the Internet. This has links to the Electronic Publications in Mathematics, which is a near to complete collection of electronic mathematical journals (all electronic and electronic versions of paper journals) which are accessible free of costs at present in the Internet. It gives links to almost 40 journals in mathematics.

PhysNet - Physics related free-access Journals (<http://physnet.uni-oldenburg.de/PhysNet/physnet.html>) Organized under the auspices of the European Physical Society (EPS) and several national societies. This site lists Physics-related full-text Journals, which are freely available on the net, offers links to offers a set of lists of links to nearly all Physics Institutions worldwide, provides lists of links to document sources of the distributed Physics Institutions.

International Consortium for the Advancement of Academic Publication (<http://www.icaap.org/>) The International Consortium for the Advancement of Academic Publication is a research and development laboratory and standards organization devoted to the advancement of electronic scholarly communication. Our mission includes the support and enhancement of scholarly journal production as well as the enhancement of online delivery of course and educational content. ICAAP specializes in developing technology for the delivery of scholarly content. There are currently 74 open access resources affiliated with ICAAP and 152 resources in the ICAAP journals database.

All these and many such more repositories provide full text search capabilities. This is due to the advancement of Web-technologies. Web-journals have an upper hand over print journals at this point. Print journal also provide search aids, however, none match the capabilities of e-journal search engines that facilitate searching with Boolean logic. Full text searching of e-journals is bound to develop further and will be a universal feature.

3. Free Journal Resources on the Web

The web is a host to loads of free journals. A few of these links are given here:

Scholarly Electronic Journals

(<http://www.library.msu.ac.th/arec/e-journal/nid.html>)

This is a list of scholarly electronic journals available FREE on the Internet selected as per subjects. The Academic Resource Center Mahasarakham University, Thailand has compiled this list. Journals can be selected, subject wise or by alphabetically.

University of Houston Library: Scholarly E-journals

(<http://info.lib.uh.edu/wj/webjour.htm>)

The University of Houston Library maintains a directory with links to online scholarly journals available free on the net. An alphabetical list is available of all journals included in this directory.

Free Medical Journals Site

(<http://www.freemedicaljournals.com/>)

The Free Medical Journals Site is dedicated to the promotion of free access to medical journals over the Internet. Created basically to promote the popularity of free journals on the web. The site also includes links to Medical Journals, whose archives are available free, trail period journals. It mentions that within the next three years, the most important medical journals will be available online, free and in full-text, else they will loose the ir popularity.

SocioSite: Electronic Journals and Magazines

(<http://www.pscw.uva.nl/sociosite/Journals.html>)

An annotated collection of electronic journals and magazines in social science from around the world. Electronic journals are listed country-wise, thematically. Contains lots of reference links also.

Serials in Cyberspace: Collections, Resources, and Services

(<http://www.uvm.edu/~bmaclenn/>)

A good reference source for E-journals and related topics.

World Wide Web Resources in Economics

(<http://www.helsinki.fi/WebEc/journals.html/>)

WebEc is an effort to categorize free information in economics on the World Wide Web. Contains a list of journals available in Economics.

All Academic

(<http://www.allacademic.com/>)

All Academic is an academic index. It is designed to provide scholars and researchers with useful on-line source information about scholarly works. All Academic catalogs free publications only! Links to commercial and fee based

scholarly publications are not included in this database. Users can browse and magazines alphabetically by title within specified academic disciplines.

Scholarly Electronic Journals

(<http://netjunk.com/users/sej/mai.y.htm>)

Gives an alphabetical list of scholarly electronic journals arranged alphabetically and also subject wise. This list also includes journals, which don't fall under the free journals category.

Psychology Journals

(<http://www.clas.ufl.edu/users/gthursby/psi/journals.htm>)

A virtual library of all Psychology journals, both print and electronic.

Health Science E-journals

(<http://www.ispub.com/ejournals.htm>)

Internet Scientific Publications LLC is an International medical publishing house on the web. Publishes about forty (40), e-journal, which are available free on the web.

4. Impact & Growth factors

Standard method of indicating the impact of a journal is through its impact factor. The impact factor is an unobtrusive and objective measure of the effect an article has on researchers. In simple words the impact factor can be best described as the measures of the current impact of the recently published articles in a particular journal. These qualities don't differ for a Print journal and an Electronic journal. In 1998 a study was carried out on impact of e-journals which were published prior to 1994, of the 38 journals, 15 had no citation in ISI Citation database, while 8 had 10 or more citations. These 8 titles, exhibited high impact factor for their field. Though this study was not limited to free journals, 6 out of the 8 journals were freely available.

The pool of free scholarly e-journals has increased henceforth. This has also lead to the change in publishing habits of researchers. In another study carried out in 1999, it was found that of the 82 titles selected from STM field, 47 received at least one citation in web of science in 1999. Of the 47 journals, 34 are e-only start-up journals with no print based partner. Thus the current results are very encouraging, while several of these journals are e-version of print journals, or have migrated from successful print journals.

The most compelling features are speed, cost, and accessibility. Other advantages, publications on the Web can offer are, Print journals are limited to static text and two-dimensional graphics, while a Web document may include audio, video, or even an interactive "applet," or mini-application, as a product of the increasingly popular Java language into Web pages.

Transmission of papers to reviewers electronically may somewhat accelerate the peer review process, but the major improvement could be realized in reduction of the time delay between article acceptance and publication. An article could literally be prepared for Web publishing and posted within hours, instead of the months necessary now for print media. Rapidity of reader access also could improve dramatically, both by eliminating the need for postal delivery ("snail mail"), but also because the reader need not trudge off to the library and wait in line for the photocopy machine in order to have her own copy of the article in hand (assuming most readers do not directly subscribe to all the journals that carry articles of interest to them).

The degree of cost reduction by electronic publication may be debatable, but there is no doubt that a significant proportion of current print periodical costs relate directly to the medium itself and its method of delivery to readers.

5. Conclusion

We can conclude that several high quality productive free scholarly e-journals exist currently. The reasons for their success are as unique as the journals themselves. Amongst the vast community of free journals available on the web, we find that they equally represent various subjects. Some are niche journals, few are government documents and most of them in mainstream topics, with devoted following of authors and readers, that want low cost, freely available/accessible information. These journals are proving in every way that an alternative to the current serial crisis of ever price increases is possible. The opportunity to create free access through the World Wide Web is unparalleled. Earlier access to readership was confined to those individuals/institutions who could afford print subscription. The low costs of publishing e-journals, open access to all, wider dissemination of knowledge has opened new vistas.

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