

# Electronic Shoes for the Cobbler's Children:



## Treatment of Digital Journals in Library and Information Science Databases

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**E**lectronic journals have become an increasingly important topic since the early 1990s. A simple free-text search for electronic journals (without synonyms like e-journals or electronic periodicals) gives a snapshot of the ten databases on Dialog that have the best coverage of the topic. Limited to articles published in 2000, Gale's Trade & Industry database added 352 records, LISA

291, Gale Magazine Database 194, UMI Periodicals Abstract and Full-Text 171, Information Science Abstracts 128, ABI/INFORM 88, and Library Literature 84. Even limiting the search to the title field, guaranteeing that the focus of the article is electronic journals, and evening out the advantage that full-text databases have over abstract-only databases, brings up an impressive number of records.

There's a big difference between covering the topic and including the journals themselves in the databases. When it comes to containing the electronic journals, there are only a handful of databases with substantial coverage. H.W. Wilson and INSPEC were the first to recognize the importance of the most important library and information science (LIS) digital journals. ERIC was next, although with only three titles. ERIC, however, deserves credit for the most comprehensive coverage of the pioneering ejournal, PACS-R, the Public Access Computer Systems Review. LISA came a little late in 1999, although with a good selection of 16 ejournals. PAIS picked four outstanding LIS ejournals at about the same time. Information Science Abstracts (ISA) waited the longest. It was late January 2001 when it started to offer records for eight ejournals in its Dialog version. Those records first appeared in the third week of March on SilverPlatter. However, the SilverPlatter

DIGITAL JOURNAL TITLES	LibLit	LISA	ISA	INSPEC	ERIC	PAIS
Ariadne	285	53	231	0	0	0
D-Lib Magazine	41	88	179	192	48	50
First Monday	0	96	84	238	0	126
Information Research	0	43	92	0	0	0
ISTL: Issues in Science & Technology Librarianship	123	24	55	55	30	0
JEP: Journal of Electronic Publishing	0	41	0	0	0	22
LIBRES	51	8	27	0	0	0
PACS-R	21	0	15	0	45	1
JILT: Journal of Information, Law & Technology	0	0	18	15	0	60
JODI: Journal of Digital Information	0	0	13	21	0	0

Coverage of six digital LIS journals by ten databases as implemented on Dialog

version was worth the wait for it offered a far better implementation from the perspective of ejournals than Dialog. On the various systems, the postings may be different depending on the latest update of the database. I used the postings information from Dialog.

lib.chalmers.se/IATUL/proceed.html), or the excellent Australian title, LASIE in PDF format (<http://www.slnsw.gov.au/lasie/welcome.htm>).

Even with this limitation, there would have been about 25 qualifying LIS electronic journals. I chose ten of these that have the widest coverage in six databases with LIS coverage.

Gale Group Trade & Industry Database(TM)	1890
LISA (Library & Information Science Abstracts)	1607
Periodical Abstracts PlusText(TM)	1124
PASCAL	988
Gale Group Magazine Database	964
Library Literature	892
Gale Group Newsletter Database(TM)	825
Gale Group Business A.R.T.S. (SM)	768
Gale Group PROMT(r) (1990 - present)	755
Information Science Abstracts	736
ABINFORM(r)	735
INSPEC (1969-present)	677
Current Contents Search(r)	573
World Reporter	529
ERIC	520

A free-text search for electronic journals shows the databases that include journal articles on the topic.

## THE TOP ELECTRONIC LIS JOURNALS

I am certainly not alone believing that many of the electronic journals in library and information science have far more relevant and timely articles for today's librarians and information specialists than many of the traditional scholarly LIS journals. They are also accessible to far more readers.

## THE DATABASES

Surprisingly, some of the databases that have good coverage of library and information science don't cover LIS digital journals at all. Although some of these databases include only a dozen or so LIS journals, like the Gale Trade & Industry database, or Bell & Howell's Information and Learning's Periodical Abstracts and Full-Text database, one or two LIS electronic journals would certainly merit inclusion. This is even more true with the PASCAL database that has many LIS journals (although the breadth of coverage is not easy to determine because the unprecedented level of inconsistency in journal names makes it as difficult as herding cats), and the Social Science Citation database that covers more than 60 purely LIS journals, some of which are cited less often than many of the electronic LIS journals). The best databases from the perspective of covering electronic LIS journals are (in alphabetical order): ERIC, INSPEC, ISA, LISA, Library Literature and Information Science, and PAIS.

Ranked DIALINDEX® Results		
Your select statement is 'S ELECTRONIC(JOURNAL)/IT'		
File	Database Name	File
<input type="checkbox"/> 41	LISA (Library & Information Science Abstracts)	417
<input type="checkbox"/> 438	Library Literature	402
<input type="checkbox"/> 440	Current Contents Search	337
<input type="checkbox"/> 202	Information Science Abstracts	244
<input type="checkbox"/> 144	PASCAL	213
<input type="checkbox"/> 2	INSPEC (1969-present)	205
<input type="checkbox"/> 7	World Reporter	159
<input type="checkbox"/> 43	World Conference	125
<input type="checkbox"/> 148	Gale Group Trade & Industry Database(TM)	112
<input type="checkbox"/> 424	Periodical Abstracts PlusText(TM)	111

Limiting the search to electronic journals in the title field only guarantees the focus of the article on the topic.

Electronic journals is not the best term (I prefer digital journals), and can be ambiguous. Some directories list among their electronic journals, even those with only a few full-text articles; others include those that have the entire current issue and several years of archive online of the print edition for subscribers. The electronic version is but a surrogate for the printed one. Here, I use the term for those serials whose complete run is available only electronically, universally available, without a paid subscription. This excludes some worthy titles that have substantial number of volumes in digital form free of charge for anyone (at least temporarily), such the IATUL Proceedings ([July/August 2001 ONLINE 47](http://educate2.</a></p>
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### ERIC

The ERIC database deserves special mention for two reasons. It is available free of charge on the Web with appealing software, and it is the only bibliographic database source that covers *PACS-R: Public Access Computer Systems Review* back to 1992. PACS-R is the brainchild of Charles W. Bailey at the University of Houston, who set the model for so many innovative electronic resources for librarians. PACS-R was the first electronic library and information science journal, launched in 1990 as an email service. Many of those early pieces are still relevant, such as the one describing the search engine that searches SGML-encoded documents. As Walt Crawford points out ([http://www.lita.org/ital/1903\\_editorial.html](http://www.lita.org/ital/1903_editorial.html)), "the *PACS Review*—a refereed electronic journal, free to readers and run by volunteers...added substantially to the literature of library automation in the 1990s." Another LIS electronic journal (among the top ten examined here) that is covered by ERIC is the excellent ACRL publication: *Issues in Science & Technology Librarianship*, edited at the University of California, Santa Barbara. It deserves mention that ERIC covers the now-defunct *Review of Information Science* to the same extent as INSPEC (12 records). Strange, however, is its treatment of *D-Lib Magazine*. All the articles in an issue are lumped together into one ERIC record.

### INSPEC

Ever since INSPEC launched its Information Technology section some 25 years ago, I have considered it to be by far the best database for information science and technology and for library automation topics. Its

When it comes to containing the electronic journals, there are only a handful of databases with substantial coverage.

reliable and predictable coverage of the best journals, impeccable indexing using its excellent thesaurus, and its most informative abstracts (with some exceptions) make it an outstanding choice. It is no wonder that along with Library Literature, another database that I associate with the word professionalism, INSPEC was one of the first to recognize the importance of electronic LIS journals and started to cover many of them early on.

Among the ten journals in this study, INSPEC covers only five, but these are the best ones, in my opinion. It has the most comprehensive coverage of the top-notch electronic LIS journal, *First Monday*, which is dedicated to Internet issues and boasts an excellent editorial team that comes through in its content. Although not listed among the top ten LIS electronic journals in my table, INSPEC also covers *Information Technology and Disabilities*, the *IATUL Proceedings*, and the *Journal of Artificial Intelligence Research*. Generally, INSPEC has the most informative abstracts, and only Library Literature matches its accuracy and consistency. It would further enhance its appeal if it covered some of the other top ten journals. Because of its essential coverage of electric and electronic engineering, and its availability through a large number of online services, INSPEC is one of the most popular databases in general, and the most widely accessible among the online services.

### Information Science Abstracts

ISA compensates somewhat for its belated start in covering electronic LIS journals by having a good mixture of them. The coverage of its eight journals goes back mostly to 1996, although for *LIBRES* and *Information Research*, it begins with the first issue. However, the composition of the journal set could be improved to match its stated scope of subject coverage better. At the request of the

file producer, Dialog changed the ISA Bluesheet earlier this year (although it did not create a print version let alone attach the new one in *Chronolog*) and removed computer science, supercomputing, medical informatics, and telecommunication from its professed primary subjects. It still lists artificial intelligence, bibliometrics, and electronic publishing, as well as the regulatory and legal issues of information technology. These would justify the inclusion of such electronic journals as the *Journal of Artificial Intelligence Research*, the outstanding *Journal of Electronic Publishing*, or *Cybermetrics*. Although *Cybermetrics* has few articles, those are as much justified as the two records for articles in the ceased publication, *Review of Information Science* or the four records for articles in the apparently defunct *Journal of Library Services for Distance Education*. Some of the journals have only a very modest presence and others have somewhat limited relevance, such as the *High Energy Physics Libraries Webzine*.

ISA should have deeper coverage of *First Monday* since it is dedicated to Internet issues and practically all its articles are relevant for the purported prime subjects of ISA. The same applies to *JILT: Journal of Information, Law and Technology*—published by the University of Warwick—which has many articles about the legal aspects of information technology, that are highly relevant in spite of the pan-European emphasis. I have doubts about the overall relevance of non-US journals that ISA still covers completely—*JILT* certainly deserves better coverage.

Its inclusion of *Information Research* is applauded. It is the only database beyond LISA that covers this superior electronic LIS journal edited by Tom Wilson of the library school of Sheffield University, one of the British pioneers of electronic journal publishing. The inclusion of electronic journals, however, may have been too

taxing for Dialog, as once again the database was royally messed up. When I wanted to double-check my results on April 1, I found that thousands of records were empty, displaying nothing more than the copyright statement of the database in response to a full-format display command. It was a bad joke even on April's Fool Day, but it has now been fixed.

### LISA

LISA has 15 LIS digital journals, although the lack of coverage of PACS-R, and especially the British titles, like *JILT*, and *JoDI*, is regrettable. They are high-quality journals, relevant for the stated subject coverage of LISA, certainly much more relevant than some of the Eastern European and Western African print LIS journals covered by LISA. It is laudable that LISA has the best coverage of *Journal of Electronic Publishing*. All the other databases in my test group should include JEP, as several of them claim to cover publishing, including electronic publishing.

Often LISA is the only source for both active and defunct LIS electronic journals that deserve coverage, irrespective of their status. To the credit of LISA, it is the only database that includes records, although only for four articles from a single issue of the *Katharine Sharp Review* (consistently misspelled), a journal that was written by LIS students. Unfortunately, it ceased publication after five years, but many of the papers deserve record in more LIS databases, such as the excellent last article about the crisis in scholarly publishing and the role of the academic library (<http://www.lis.uiuc.edu/review/8/tinerella.html>).

It is also the only database that has a full coverage of *Exploit Interactive*, the electronic LIS journal of the EEC that discusses issues that do not know borders, such as measuring Web performance or personalized library interfaces. The journal was a by-product of European digital information projects and ceased publication in accordance with the original plan. It is nice to have the complete coverage of this very useful electronic resource. Although the coverage of another electronic journal, the *ICSTI Forum of the International*

*Council for Scientific and Technical Information* goes back only to 1999, it is yet another valuable source—LISA is the sole database to cover it.

### Library Literature & Information Science

This H.W. Wilson database, still called Library Literature on Dialog, has the most comprehensive coverage of *Ariadne*, *ISTL*, and *LIBRES* (all of which deserve full coverage in a library and information science database), and is a model for professional database editing in terms of accuracy, consistency, and reliability. On the other hand, its coverage of *D-Lib Magazine* only goes back to 2000. Beyond my core journals, it also covers very well the online edition of *Annual Review of OCLC Research*, the *Independent Publisher*, and electronic journals that are essential for media librarians, such as the *MC Journal*, *ALCTS Newsletter*, and the *School Library Media Quarterly*, along with its successor title, *School Library Research*. It should cover *JEP* and *Information Research* as well because they are highly relevant for the database stated subject coverage.

The most significant limitation of Library Literature is that it does not have abstracts, and is likely to remain the only database in the Wilson database family without abstracts. Of course, this is reflected in its low price of \$2.40 DialUnit. True, it has an index plus the full-text version on its own Internet site (<http://www.hwilson.com>) with the slightly different database name of Library Literature & Information Science, but that does not compensate for the lack of abstracts. The 106 journals (there are 299 titles in the indexed version) that are in full-text do not include electronic journals (because they are freely available online).

### PAIS

The PAIS database is not likely to be considered by a searcher on library and information science topics, even though it has selective, but good coverage of about 40 LIS journals. Therefore, it is not very surprising that PAIS has only four of the journals in this study, but it is surprising that PAIS has the second best

coverage for *First Monday*, *JEP*, and *JILT* among my top ten electronic journals and has adequate coverage of *D-Lib Magazine*. The summaries are very short, not really abstracts.

### RECORD CONTENT AND ONLINE SERVICES

Record content and online services go hand in hand, something newer searchers might overlook. Indexes generated from the same record content have always been vastly different across online services. For example, the journal name field may be indexed word by word in one system and as a phrase in another. They have different prefixes or suffixes in the different systems. But the content of the bibliographic citations is usually identical, except for their arrangement.

This is certainly *not* the case with regard to electronic journals. Some of these databases are available on several online hosts, and offer good examples of how they handle unique content, particularly the URL of the item described. Dialog and SilverPlatter offer the most databases relevant for electronic LIS journals, followed by OCLC. (CSA has a version not only for LISA, but also for ERIC and PAIS but these were not included in the test.)

Library Literature & Information Science 1264-201 UPDATED FEB 09

Full Record

Back Print Save Email

Related Web Sites

TITLE Electronic publishing of scholarly journals: a bibliographic essay of current issues (computer file)

AUTHOR(S) Bruce, Charles; Duggan, Martin; Frankforter, Amy

JOURNAL NAME Library Literature & Information Science

SOURCE Library Literature & Information Science, no. 23 (Spring 1999)

PUBLICATION YEAR 1999

ISSN 1092-1206

LANGUAGE OF WORK English

DESCRIPTORS Electronic publishing; Bibliography; Library literature; Information science

Author(s) Bruce, Charles; Duggan, Martin; Frankforter, Amy

Title: Electronic publishing of scholarly journals: a bibliographic essay of current issues (computer file)

Source: Library Literature & Information Science, no. 23 (Spring 1999), Journal Code: ISSUES (Library Literature & Information Science)

Standard No: ISSN: 1092-1206

Language: English

Article: <http://www.lis.uiuc.edu/review/8/tinerella.html>

Related Resources: <http://www.lis.uiuc.edu/review/8/tinerella.html>

DESCRIPTORS Electronic publishing; Bibliography; Library literature; Information science

Record Type: article

Article Type: bibliography

Accession No: BLI99011293

The odd thing is that H.W. Wilson's implementation on its own Web site never lists the item's URL, but OCLC lists it and makes it a hotlink.



For articles in electronic journals, the most distinctive feature of the bibliographic record is the inclusion of the URL of the item (article) being described by the record. The purpose of this is to allow the user to quickly locate the item. If the URL is hot-linked, then it takes just a matter of seconds to display the source item. This may not work if a user id and password are needed for logging into the site of the electronic journal, even when it's a free site. Additional URLs may be included to locate the site of the journal, the publisher, and/or the author. These are not essential, as the user can easily figure these out from the source item. Their inclusion increases the chance for dead links and can cause more frustration than benefit.

#### URL INCONSISTENCIES

A list of URLs for the sites mentioned in the source document may be also provided, as is done by Library Literature & Information Science, although very selectively. Quite often the number of sites referred to in an article can be overwhelming. The odd thing is that H.W. Wilson's implementation on its own Web site never lists the item's URL, but OCLC lists it and makes it a hotlink. Both online services list the cited (or related) sites, although not always exhaustively, and they are not consistently hotlinked.

This is just the tip of the iceberg of idiosyncrasies. With a few exceptions, there is no consistent pattern regarding the inclusion and hotlinking of the URL of the item described. For example, ERIC has no hotlinks for either of its free versions. They are present, however, in the Ovid

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and SilverPlatter implementations, and OCLC is inconsistent. INSPEC records on Ovid and SilverPlatter lack URLs for the source items, although URLs of the sites referred to in the documents were. ISA has no hotlinks on Dialog (a Dialog failing), but it does on SilverPlatter. On Cambridge Scientific Abstracts, LISA has hotlinks, but they were cold in SilverPlatter—unusual, since SilverPlatter has the capability to turn cold

links to hot ones—and several records found on CSA were missing from the file on SilverPlatter. Although the links are not even included for Library Literature & Information Science on the Wilson Web site, they are both present and hot with OCLC's implementation.

#### WHAT'S THERE, WHAT'S NOT

The variety that I encountered in looking up randomly selected items

Item (Jnl)		CSA	DIALOG	HWW	OCLC	Ovid	SPIRS
<b>Essay (ISTL)</b>							
ERIC	1		C		C	H	H
INSPEC	2		C			H	H
ISA	3		N				H
LibLit	4		N	N	H	N	N
LISA	5	H	C				N
<b>MOBIS (LIBRES)</b>							
ISA	6		N				nr
LibLit	7		N	N	H	N	N
LISA	8	H	C				C
<b>RefLink (D-Lib)</b>							
INSPEC	9		C			N	N
ISA	10		N				H
LibLit	11		nr	nr	nr	nr	nr
LISA	12	H	C				N
PAIS	13		C		nr	N	H
<b>SOSIG (Ariadne)</b>							
ISA	14		nr				nr
LibLit	15		N	N	H	N	N
LISA	16	H	C				N
<b>DOI (PACS-R)</b>							
ERIC	17		C		H	H	H
ISA	18		N				H
LibLit	19		N	N	H	N	N
<b>Griffella (First Monday)</b>							
INSPEC	20		C			H	H
ISA	21		N				H
LISA	22	H	C				C
PAIS	23		C		H	N	H
<b>Defamation (JILT)</b>							
INSPEC	24		C			H	H
ISA	25		N				nr
PAIS	26		C		H	N	nr
<b>Electronic Rights (JEP)</b>							
LISA	27	H	C				N
PAIS	28		C		nr	N	H

C = cold link    N = no link    H = hot link    nr = no record



from eight of the ten journals (*Information Research* and *JoDI* were not included in the summary table to keep the table manageable) was mind-boggling.

The Table is electronically available on my Web site (<http://www2.hawaii.edu/~jacso/extra>). This offers two advantages over the print version. Each variation that has a code in the cell has a corresponding screenshot of the record. Clicking on the code will pop up the screenshot made of the record content. In a case where no record is found, the screen of the search result is linked to the "nr" code. Even the print version of the Table illustrates clearly the unpredictability and inconsistency in providing URLs for articles in electronic journals.

For a starter, it is baffling why there are no records in the OCLC version of PAIS for articles in the *D-Lib Magazine* and *JEP* when the other versions of PAIS have those records. Remember, OCLC is now the *owner* of the PAIS file. (It is another question why Dialog has cold URL for the items, and Ovid has only URLs for the mirrored sites of the journal not the source item, one of which is obviously wrong for a D-Lib article. For the other articles, there are no URLs at all.) There is a similar situation for the *D-Lib Magazine* article in the INSPEC implementations. Ovid and SilverPlatter do not have the URL for the item, but they have two URLs for the publication and one of them is obviously wrong.

Why is it that the OCLC version of PAIS has a hotlink to the article about Gnutella, but Ovid does not even have that data element? Why does only the OCLC version have a hotlinked URL to the source articles

If the URL is hotlinked, then it takes just a matter of seconds to display the source item.

in Library Literature & Information Science, but none of the other implementations?

There is no easy answer to these questions. The problem may be that an online service did not receive on the tape that data element in the records that describe the URL of the source item. It is possible that the online service just did not update its import procedure to extract this data element. As different specialists handle different databases at the online services, one database may show the links, another may not. This may explain also why these data elements are hotlinked in some, but not all, of the databases offered by a specific online service. Yet another reason may be the lack of consistency where the URL appears in the records. LISA is the most inconsistent, showing the URL of the source document in the source field, at the beginning of the abstract, or somewhere else in the body of the abstracts. Lastly, online services may take the trouble of moving these URLs into a specific field within the record for sake of consistency and easier searching. This seems to be the case with the CSA version of LISA.

#### ABSENT WITHOUT LEAVE

The absence of records, another enigma, can sometimes be explained by belated updating, but this inconsistency is rather confusing even for the experienced searcher, especially, when there are many data elements that are hotlinked to launch a search for articles by the same author, or in the same journal.

There are only a few consistent patterns. Library Literature never has the item's URL except in the OCLC implementation that also makes the URL hotlinked. Dialog never has a hotlinked URL, as it is not capable even of intra-database links by author, journal name, descriptor, and other data elements that other systems can do, let alone of external linking. It often does not even display

the item's URL when SilverPlatter not only displays it in its implementation, but often makes it hotlinked. CSA was able to create valid hotlinked URLs for all of the LISA records.

Mainstreaming electronic journals into the abstracting/indexing databases of print journals is a good idea from the perspective of those who have a flat-rate subscription to one or more of the previous databases or who prefer to search an aggregated file rather than hop from journal Web site to journal Web site. However, if you access these systems on a pay-as-you-go basis, it is an expensive search. It is also frustrating, if the URL of the source item is not included in the record, or is erroneous. When the URL is present, cutting and pasting it into the browser address cell to be taken to the source item is a simple procedure. The best solution, of course, is the hotlinked URL. Users will not long put up with such idiosyncrasies, so the online service providers should find a way to extract from the records the most essential URL(s), and to make them browsable and searchable. It is also true that some LIS digital journals are not included in any bibliographic database.

If you don't have a flat-rate subscription to these systems, don't despair. Many of the journals have excellent search capabilities, and if you bookmark the most important electronic journals, you can easily find relevant articles. A better approach is to create a vortal and launch your searches in the appropriate archive from a central site. The best solution is to have a special metasearch engine that would run a single query across the archives of several journals.

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