The Electronic Information Resources Task Force was formed by the University of Rhode Island Library to evaluate the present program and plan for and develop improvements. The specific charges to this Task Force were to: evaluate the range of the electronic information and delivery mechanisms relevant to the programs of the University of Rhode Island; identify means to provide access to relevant electronic journals; develop a plan for implementing new resources and/or changing the configuration of existing resources; develop a working strategy and plan for integrating traditional library resources with electronic resources; work with colleagues in academic computing and the colleges to facilitate student and faculty understanding and utilization of the Internet and the World Wide Web; and develop instructional methods for teaching students about information resources on the Internet and through World Wide Web. Twelve recommendations which are listed at the beginning of the report are discussed in detail in the body of the report. (AEF)
Report Of The

Electronic Information Resources Task Force

7 February 1996

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."
Executive Summary

1. **Recommendation:** As a publicly funded institution, we should strive to offer the public access to all our electronic resources whenever this can be done without degrading this institution’s access to that service or incurring additional expense.

2. **Recommendation:** Ideally, all electronic information should be available on users’ desktops, whether they are at home, on campus, etc.

3. **Recommendation:** We want to move away from CD-ROMs to direct online access to electronic indexes and sources of full text articles.

4. **Recommendation:** The Libraries will need to offer increased printing capabilities as more library resources are available electronically.

5. **Recommendation:** At this point in time, electronic journals are not a satisfactory replacement for print journals.

6. **Recommendation:** The University Libraries need to provide a coordinated consistent position in their dealings with HELIN and other outside groups, consortia, etc., of which the Libraries are a member.

7. **Recommendation:** In addition to the increased computer hardware and software needs that increased access to electronic information in the libraries will bring additional personnel also will be necessary for technical support and user instruction and assistance.

8. **Recommendation:** The University Libraries and the ACC should coordinate their efforts in World Wide Web training.

9. **Recommendation:** The current terminals used by Library patrons should be replaced with fully functioning workstations.

10. **Recommendation:** The current Helin software should be replaced with the III WebPac module.
11. **Recommendation:** The University Libraries should develop a method for the selection of free electronic resources.

12. **Recommendation:** The University Libraries should create a Reference Web page.
Introduction

On Friday, December 8, 1995, Dean Michalak, Vice-Provost of Information Services and Dean of University Libraries announced the formation of four task forces which would review various aspects of the Libraries' operations. The charge to this task force, the Electronic Information Resources Task Force, was as follows:

Purpose: Evaluate the range of the electronic information and delivery mechanisms relevant to the programs of the University of Rhode Island; Identify means to provide access to relevant electronic journals; Develop a plan for implementing new resources and/or changing the configuration of existing resources; Develop a working strategy and plan for integrating traditional library resources with electronic resources.

Work with colleagues in academic computing and the colleges to facilitate student and faculty understanding and utilization of the Internet and the World Wide Web; Develop instructional methods for teaching students about information resources on the Internet and through the World Wide Web.

Assumptions: Hardware and the software will not be an obstacle to implementation.

The task forces were to begin their discussion following an initial meeting of the task forces chairs with the Dean and the Director of
Libraries. That meeting will be held on Friday, December 15, 1995.

The first meeting of the Electronic Information Resources Task Force was held on Wednesday, January 3, 1996 and meetings continued on at least a weekly basis. In carrying out its charge, the committee members reviewed recently published journal literature pertinent to our topics, interviewed the HELIN systems librarian and the Head of Reference, and reviewed the reports on electronic information resources provided by the other New England Land Grant Universities.

The following are our conclusions:

1. **Recommendation**: As a publicly funded institution, we should strive to offer the public access to all our electronic resources whenever this can be done without degrading the institution’s access to that service or incurring additional expense.

2. **Recommendation**: Ideally, all electronic information should be available on users’ desktops, whether they are at home, on campus, etc.

3. **Recommendation**: We want to move away from CD-ROMs to direct online access to electronic indexes and sources of full-text articles. The reasons for wanting to move away from CD-ROMs are: 1) they only provide access to a limited number of users at one time, due to both licensing restrictions and technological constraints; 2) searching them is slow compared to many online sources; 3) they are expensive, both in maintaining hardware and in personnel time expended on their maintenance; and 4) CD-ROM LANs are prone to technical problems. Examples of online indexes and sources of full-text articles that would be preferable to CD-ROMs are Expanded Academic Index, OVID, and FirstSearch.
A. Our primary criterion for online electronic information services is reliability. We recommend reliability over sophisticated searching abilities, as most patrons do not utilize advanced searching techniques.

1. Expanded Academic Index is very reliable--this is the type of service we want. However, going with more dedicated connections such as EAI would be prohibitively expensive. (Each library in HELIN pays $13,500 per year for Expanded Academic Index.) Much depends on the new Internet backbone which hopefully will be in place by 1997, which should make Internet connections faster and more reliable. We are faced with the "Catch-22" of, on the one hand, the Internet currently being far too unreliable and slow and on the other hand the prohibitive cost of dedicated lines.

B. Given comparable reliability among electronic products, we should choose whatever is the cheapest.

C. The ideal interface for searching various indexing/full-text databases would be free and generally available, such as a World Wide Web browser. Simple "pointing and clicking" as with Netscape would be desirable.

D. The ideal interface for searching various indexing/full-text databases would also be standardized, so that library patrons could access many, if not all, of the Libraries' electronic databases using the same searching language.

E. We recommend indexes which include full-text, such as Expanded Academic Index, and now NewsBank, etc. Where full-text is not available, we recommend indexes which allow for the Libraries' journal holdings to be displayed.

F. Journals which are available in full-text through subscriptions to products of proprietary information providers, such as Expanded Academic Index, should be cataloged in HELIN.
For those journals available in full-text electronically which the Libraries also own in print, an additional item record should be added to HELIN indicating that the journal is also available electronically through the appropriate service.

G. A facsimile image of full-text articles is preferable to ASCII text.

H. In cases where journals are received on CD-ROM as part of the subscription to the print version, we recommend not adding these CD-ROMs to the CD-ROM network. We recommend forwarding these CD-ROMs to the appropriate subject selectors for their information only.

I. An important consideration in the purchase of specific electronic resources should be the publishers' plans and goals for the future, i.e. are they planning to offer access through a World Wide Web browser, etc.

J. We recommend retaining a subscription to DIALOG (and/or similar pay-per-search databases) as they are economical in that you only pay when you use them and these databases provide access to important sources, many of which the Libraries could not otherwise afford. Library patrons should continue to pay in part or in full for these services.

4. **Recommendation:** The Libraries will need to offer increased printing capabilities as more library resources are available electronically. Xerographic-quality printing will need to be available to take advantage of full-text services, such as Expanded Academic Index, which offer scanned images of articles, including photographs and sophisticated charts and diagrams. Without such high quality printing capabilities, features like charts and diagrams will not be useful to Library patrons. In addition to xerographic-quality printing, there also needs to be increased capabilities for laser printing for printing of citations, data downloaded from the WWW, etc.
A. We recommend a centralized printing facility, such as a printing room in the library, to which all print jobs from public stations in the library are sent. This would result in better use of printing resources, as all printers would be constantly used, instead of sitting idle as they might be if attached to only one computer. Printing jobs would also spread out more evenly over all printers. People printing from home should also be able to print to the centralized printing facility, or to the Academic Computer Center.

B. We recommend that the Libraries charge for the printing of electronic information, as has always been the case for photocopying print material. Patrons seeking to avoid expense could download or e-mail to themselves the electronic information and could print it without cost at the Academic Computer Center or one of the microcomputer labs. We recommend that any electronic resource to which the Libraries subscribe have downloading and e-mail capabilities.

C. The Academic Computer Center staff should be responsible for technological support and maintaining any printing facility, as they have both the expertise and connections with repair services.

D. A printing facility would need to be staffed all hours that it was open.

5. Recommendation: At this point in time, electronic journals are not a satisfactory replacement for print journals. This is true for a number of reasons: 1) they are not widely used or in demand by the scholarly community; 2) there is no stability or standardization among electronic journals: some are free and some cost; some consist only of selections from their print counterparts, while some are complete; some archive old issues, some don’t; the electronic formats in which they are available vary; 3) there have been little or no precedents set within academic libraries on their acquisition and cataloging. Right now, we would not best be serving the Libraries’ users by making a move toward electronic journals. If at some
point in the future they prove to be a satisfactory replacement for print journals, we recommend subscribing to them and canceling print subscriptions, on the assumption that this would save money because the Libraries would only be paying for what was actually used.

A. If, before the time comes that the publication of journals electronically is widespread, a specific print journal which we deem essential to our collection, is changed to electronic format only, we should subscribe to it electronically.

B. We recommend subscribing to a few electronic journals right now as an experiment, to familiarize ourselves with the different types which may be available and the issues and ramifications that arise with their use.

C. We recommend pointing immediately to selected free e-journals through the Libraries web page(s).

D. Each electronic journal subscription should be evaluated on an individual basis and a collection development decision should be made following the same general principles used for any paper subscription.

E. Online versions of journals, the access to which is received free with print subscriptions should be evaluated for possible inclusion on the Libraries’ web page(s).

F. We recognize that significant advances in computer monitor resolution and usability will have to be achieved before electronic journals can succeed on a widespread level. Until these advances are achieved, and perhaps afterwards as well, library users will rely on printing electronic articles, which further emphasizes the need for increased printing capabilities in the Libraries.

G. Technology is changing so quickly that the question of whether or not to store electronic journals on a Library/University computer or to access them remotely can only be resolved nearer to the time of a switch to electronic journals.
Much also depends on the capabilities of Innovative Interfaces at that time and on the plans of the publishers of electronic journals.

H. As the Library moves to the III WebPac module, the most efficient way to point to electronic journals will be to embed the URL in the 856 field of the HELIN catalog record.

6. **Recommendation:** The University Libraries need to provide a coordinated consistent position in their dealings with HELIN and other outside groups, consortia, etc., of which the Libraries are a member. What the Libraries will be able to undertake in the area of access to electronic information will depend heavily on the goals and future capabilities of Innovative Interfaces, Inc. It will also depend on the goals of other groups of which the Libraries are a part, such as the HELIN consortium, CRIARL, and the Land Grant State Universities. The Libraries need to keep informed of the plans of all of these groups, as these plans will impact heavily on the decisions we can and do make. If the Libraries’ goals diverge sharply from the goals of these organizations, the Libraries should re-evaluate their relationships with them.

7. **Recommendation:** In addition to the increased computer hardware and software needs that increased access to electronic information in the Libraries will bring, additional personnel also will be necessary for technical support and user instruction and assistance. As the Libraries gain a larger patron base through remote electronic access capabilities, Reference will receive more questions per unit of time.

8. **Recommendation:** The University Libraries and the ACC should coordinate their efforts in World Wide Web training. Both the Libraries and the ACC have provided web training in the past. The Libraries tend to teach subject based classes that are requested by various professors on campus. The ACC focuses more on the technical “how-to aspects” of the Web and Netscape. The students will benefit more if both the Libraries and the ACC coordinate their efforts so that the students learn both the technical aspects
and the subject aspects at the same time. The following implementation would meet this objective:

The Libraries and the ACC could offer two-hour web workshops regularly throughout the semester, especially in late spring and early fall, to provide maximum access for the research elements on campus. Each workshop would aim at a certain discipline, e.g., one on biological sciences, one on social sciences, one on business...etc. The ACC would present the usage and technical aspects in the first half-hour, and the Library would provide pointers to information gathering in the second half-hour. Students would have hands-on practice in the second hour with the assistance of the ACC staff. We should also offer classes at other campuses (GSO and CCE) as well. This plan should be re-evaluated every semester. We also hope that the ACC would continue to provide technical support with Internet software set-up for the campus community.

For Kingston students, we could use Library 104 (60 seats) or Chafee 277 (120 seats) for a seminar and then bring the students to the Library Electronic Classroom or Chafee 241/244 computer lab for hands-on training. Both Library 104 and Chafee 277 are on the URI-NET to connect to the Internet. A multimedia presentation IMPAC.T cart is located in Library 104, while another can be wheeled down from the Audiovisual Center to Chafee 277. The past experiences have shown that only 1/3 of the students stay for hands-on sessions; the rest of them prefer seminar only. That means that we would not have a seating problem in the computer lab, which has about 15-20 workstations.

It is hoped that the demand for basic web training for the URI community will level off after a couple of years, especially in the area of technical knowledge, as this kind of knowledge becomes more widespread generally.

9. **Recommendation:** The current terminals used by library patrons should be replaced with full function workstations. Patrons in the Library should have
access to computers that will allow them to reach electronic resources without undue waiting time or difficulty. One way to accomplish this would be to replace the WYSE terminals that currently allow access to HELIN with fully functioning workstations of some type (without word-processing capability). This would allow access to both HELIN and a WWW browser from the same machine, as well as allowing for greater printing capability.

10. **Recommendation:** The current HELIN software should be replaced with the III WebPac module. WebPac is the new III WWW browser. This would move both the online catalog and Internet access into one system, which would hopefully make the system easy to use. Regularly scheduled instruction on this system should be provided. Also, if feasible, some type of self-instructional module should be available.

11. **Recommendation:** The University Libraries should develop a method for the selection of free electronic resources. The following points should be addressed in the creation of this procedure.

   A. Deciding which of the thousands of free sites of information on the Internet the Libraries should point at is a daunting task at best. What can be said is that whatever process is used to chose those sites, the following should be considered:

   1. **Content of the Resource:** Is the information correct? Does the information come from a reliable source? An example would be Government Resources vs. a personal homepage.

   2. **Reliability and Currency:** Will this source be in existence when a patron needs it, and will it be in the same place? This is probably the most difficult to discern, particularly when dealing with free sources of the information. Also, the information must be kept up-to-date. Currently, only the government and some large institutions have sites with high reliability. Some test of reliability that the Libraries could use may need to be developed.

   3. **The Archival Question:** Essentially, have arrangements been made to keep the sources' backdated information? Is the archive easily accessible, or is it essentially off limits to all but
the administrator of the site? If the source does not have an archive, is the information ephemeral to the point where an archive is not necessary? Another aspect of this question is that if the site does not have an archive, are the Libraries willing/able to take on the archival responsibilities of the site(s) in question?

B. An ad-hoc committee should be created to train and assist in electronic collection development until the subject selectors of the Libraries are trained in this new aspect. It is understood that some subject selectors might not feel up to the task of selecting in a totally new medium overnight. It should be stressed that this committee should not exist for more than a year or two at most. Ultimately, the existing collection development scheme must be flexible enough to deal with this new form of information handling.

12. Recommendation: The University Libraries should create a Reference Web page. While it is understood that the Libraries can not realistically try to cover all of the sources available on the Internet, we should be able to identify the best sources and point to them through subject-specific Reference Web pages. This would allow us to reach the greatest number of people, while at the same time giving us an easy way to maintain and update the links as necessary. We also believe it is necessary in this endeavor to garner as much support as possible from the various departments of the University. In this way, we can assure that all facets of the University have information about the access to the best resources currently available.
Cautionary Notes

**Cautionary Note 1**: As the Libraries move to rely on electronic access to sources of information in lieu of print sources, we must realize that our ability to provide our services is at the mercy of system failures and power outages. There will be times when the Libraries will cease to exist electronically.

**Cautionary Note 2**: If electronic access comes to take the place of paper for certain publications, such as journals, the publishers of this information will have more control than ever over their product. Each time anyone even looks at the information, the publisher can collect money, if they control all access to it. If this is the case, it would not be unlikely for journal prices to increase even more!

**Cautionary Note 3**: As more information is available only electronically, the danger of censorship increases. If the government or certain groups of individuals wanted to limit access to certain information, they would essentially only have to block the one source of the information the publisher (as opposed to finding every print copy and seizing or destroying it.)
The Electronic Library, Electronic Journals, Electronic Information

A reading list of recent papers available to the Task Force, arranged chronologically.


**Report of the Electronic Information Resources Task Force**

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