Although electronic media have not transformed the essential nature of scholarly research, they have altered it because of the scope and scale of interactive electronic tools now available on the Internet. Several of these tools are discussed in reference to research in the history of education, and some information about copyright in the electronic area and the availability of graphic resources is presented. E-mail and listservs are becoming indispensable tools for researchers. They can be used to circulate ideas and information and to transmit electronic journals. The World Wide Web is already recognized as a great resource for teaching and learning. One of the primary uses of the Web in research is the exploration of databases. Although there are not many Web sites devoted to the history of education at this time, there are three which are worth noting: (1) a site dedicated to the "International History of Education"; (2) "Mary Lyon on the Web," produced by Mt. Holyoke College; and (3) the "History of American Education Web Project," from Indiana University, South Bend. A good treatment of copyright issues in the electronic area can be found at "The Copyright Website" page maintained by an attorney specializing in these issues. The Web also makes photographs available for historians, through a variety of sites. This brief glimpse of electronic research in the history of education shows that traditional methods of historiography and evaluation have been altered by the advent of electronic media. (SLD)
Electronic Research and the Educational Historian

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ELECTRONIC RESEARCH AND THE EDUCATIONAL HISTORIAN

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INTRODUCTION

Electronic media have not transformed the essential nature of scholarly research, but they have altered it. This is due to the scope and scale of interactive electronic tools now available on the Internet. Several of these tools (e-mail, listservs, and the World Wide Web) will be considered in this paper, together with examples of their use in research. Additionally, some information concerning copyright in the electronic area, and availability of graphic resources, will be presented.

E-MAIL AND LISTSERVS

E-mail and listservs are becoming indispensable communication tools for researchers. They can be used to float ideas among research colleagues, get reactions to drafts, obtain resources (e.g., information on where data may be obtained, as well as the actual obtaining of the data), obtain feedback on resources (e.g., information on its quality), and facilitate speedier blind reviews. In the case of listservs, these things may be done without knowing ahead of time the identities of the people to whom the requests are made or from whom the replies are coming. This can, of course, be both a strength and a weakness.

E-mail and listservs may be used to transmit electronic journals and/or their tables of contents and/or abstracts of their articles. An example of an electronic journal is Gene Glass' Educational Policy Analysis Archives (EPAA). An abstract of newly published EPAA articles is sent by American Educational Research Association (AERA) listservs to the listserv subscribers with the full articles being available on the EPAA web page (http://olam.ed.asu.edu/epaa/). To illustrate the interactivity involved in this e-journal, the choices available on its web page are as follows: enter the archives, browse the abstracts, visit the editors, visit the editorial board, submit an article, submit commentary (on a previously published article), subscribe to EPAA, and search in EPAA.

AERA's Division F (History and Historiography) maintains its own listserv (aera-f@asuvm.inre.asu.edu). Besides e-mailing to all of its subscribers copies of postings sent to the list, it maintains an index of all of its subscribers and monthly logs of all postings which have been made during the month. For example, the monthly log for March, 1997, contains (as of March 15) five postings which requested advice on a research topic, seven postings responding to these requests for advice, a posting announcing an article in the 3-18-97 issue of FORBES magazine in which Peter Drucker predicts that colleges won't survive as residential institutions in the face of the growth of electronic delivery of instruction, and a posting announcing a new web page on History of Education and two replies to this posting.

THE WORLD WIDE WEB

The Web is already recognized as a great resource for teaching and learning activities. A article in the March issue of Educational Researcher by Ronald D. Owston (1997) is fairly affirmative of this position, despite its somewhat guarded title. The Web as a resource for research is even more promising. Here are some of its possibilities:

Databases

One of the primary research uses of the Web is the exploration of databases. The ability to search large blocks of data is one of the Web's strong points. Take for instance "Historical, Social, Economic and Demographic Data from U.S. Censuses from 1790 - 1860" (http://icg.harvard.edu/census/). Here one can search for decennial census data by year, topic, state, and county with an easy-to-use menu-type selection...and do it in seconds. Not only can data be searched on the Web, it can also be collected there.
This can be done easily through the use of HTML forms embedded in Web pages.

One of the most useful databases for educators has been the Educational Resources Information Center (ERIC). Not only are ERIC holdings now searchable on-line, but complete documents will also soon be available on line. We've come a long way from the days of sorting manually through ERIC microfiches!

Speaking of searchable educational databases, this year's AERA Annual Meeting Program is not only available on-line in an electronically searchable format, but also has a "more like this" feature which allows the searcher to follow-up an initial search with a request for similar sessions complete with a bar graph measure on how similar the sessions are to sessions found in the initial search.


History of Education Web Sites

There are not yet many Web sites devoted to History of Education. Three, however, are worthy of mention. The first is a site dedicated to International History of Education (http://www.xs4all.nl/~setten/eindex.html) created and maintained by Henk van Setten of the University of Nijmegen in the Netherlands. The scope of this site is prodigious. Its extent may be gauged from its divisional headings and the number of links to other sites under each: news and info about history of education and childhood (3 links), archives and source collections (3 links), on-line bibliographies (5 links), magazines (1 link), newsgroups/discussion lists (1 link), national/international research organizations (6 links), on line education classics (12 links)...lost your copy of Comenius' Labyrinth of the World and Paradise of the Heart? Pick it up here!, important educators (11 links), children, childhood, and family (6 links), school education (8 links), special education (3 links), other (3 links)...for example, one of the links here is "Girl Scout History", curiosities (3 links)...one of the links here is "the One-Room School Homepage," and general...the only link here at present is "WWW Services for Historians." It is important to emphasize the "at present" in the last sentence. Henk van Setten is committed to increasing the links on his site and will update his links if submissions meet the criteria he has established (which are listed at the end of his "History of education and childhood" links.

The second History of Education Web site is one called "Mary Lyon on the Web" (http://www.mtholyoke.edu/marylyon/). It was produced by Mt. Holyoke College and is the result of collaboration between historians, archivists, and professional web site developers. It is remarkable not only for its pedagogical quality (leveled at a Middle-school audience), but for its artistic achievement.

The third site (which has been named an "Internet Site of the Day" by The Chronicle of Higher Education) is the History of American Education Web Project (http://oit.iusb.edu/eduweb01/). It features essays by my students at Indiana University South Bend. It also has many pictures related to American educational history. To alleviate downloading problems for these graphics, "thumb-nail" pictures are used. That is, pictures approximately an inch square are originally presented when the page loads. If the user wants to see a larger version of the picture, she or he need only click on the thumb-nail picture and a much larger version of it will appear.

COPYRIGHT CONSIDERATIONS

The web project mentioned above brought to my attention questions involving the use of copyrighted material on the Web. A good treatment of copyright issues in the electronic area can be found at The Copyright Website (http://www.benedict.com/). This page is maintained by Benedict O'Mahoney who is an attorney specializing in these issues. Many historical materials are no longer covered by copyright. That is, they are in the public domain. Many more, however, are still under copyright. This brings up the question of "fair use." Copyrighted materials may be excerpted without permission if they meet the "fair use" test. This test is covered extensively by O'Mahoney at the above-mentioned site. Basically, it involves four points: purpose and character of use (e.g., is it commercial or non-profit, and does it change or put the original work in a new light?), nature of the copyrighted work (e.g., how essential is it that the original work be protected?), relative amount (e.g., how much of the work was copied?), and effect on potential market (e.g., what harm does copying do to the potential marketing value of the original work?). In an interesting demonstration of the potential of the Web, O'Mahoney lets users listen to two examples of musical compositions which were the subject of a lawsuit and then lets them judge for themselves if copyright law was violated.
GRAPHICS SOURCES ON THE WEB

The American History of Education Web Project also raised problems concerning sources for pictures related to History of American Education. Several solutions were found. One was to take existing photographs and scan them into digitized form suitable to use on a computer. Another was to search for photographs already extant on the Web. This was done by visiting collections, such as the American Memory project of the Library of Congress (http://lcweb2.loc.gov/ammem/), from which pictures could be saved to disk in graphical image format (.gif). A third solution was to use one of the many search engines on the Web (e.g., Yahoo [http://www.yahoo.com/]) to locate appropriate pictures. With all of these solutions, however, the copyright considerations mentioned above had to be observed.

CONCLUSION

Some might think that history is an immutable subject. However, the interpretations of it are always subject to change. Likewise, this brief glimpse at electronic research in History of Education has shown that traditional historiographical methods of discovery and evaluation, although they have not been made obsolete, have certainly been altered by the advent of electronic media.

NOTES

I am grateful to Larry Rudner (rudner@cua.edu) of the ERIC Clearinghouse on Assessment and Evaluation for suggestions which he contributed to this paper.

A copy of this paper, with links to the cited material, is available on the Web at http://oit.iusb.edu/~rbarger/electronic_research.html

REFERENCES

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