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ABSTRACT
              This study is an attempt to do the following: (1)
determine the extent that CD-ROM databases are used by librarians and
patrons in Ohio law libraries; (2) define librarian and patron
research preferences comparing CD-ROM, print, and online resources;
(3) track general trends in law library acquisition of CD-ROM
databases; (4) examine the degree of CD-ROM training offered in Ohio
law libraries; (5) chart the availability of CD-ROM publications on
computer networks in Ohio law libraries; and (6) document librarian
opinions concerning the importance of print materials in an
environment where duplicate electronic resources such as CD-ROM and
online services are available. Research was conducted through a
survey mailed to a population of Ohio law librarians. The literature
review discusses the general characteristics of CD-ROM databases, the
growth in the number of legal titles in CD-ROM format offered
annually, and the results of a 1994 survey of CD-ROM usage in New
York law libraries. Analysis of the data collected indicates that:
CD-ROM is widely and frequently used in Ohio law libraries; it is not
used as frequently as print or online resources; there is an
increasing trend to offer CD-ROM titles through computer networks to
multiple users; librarians endorse retention of print holdings
duplicated by CD-ROM; and librarians recognize that CD-ROM is
steadily duplicating at least a portion of the print materials in
their collections. An appendix contains the survey questionnaire and
cover letter, works cited and bibliography. (Contains 14 references.)
(Author)

ED 401 943

# INTRODUCTION AND IMPLEMENTATION OF CD-ROM
## TECHNOLOGY IN OHIO LAW LIBRARIES

A Master's Research Paper submitted to the
Kent State University School of Library Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Scott Larson

April, 1996

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ABSTRACT

## INTRODUCTION AND IMPLEMENTATION OF CD-ROM TECHNOLOGY IN OHIO LAW LIBRARIES

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Date:  April, 1996

This study is an attempt to determine the extent that CD-ROM databases are used by librarians and patrons in Ohio law libraries; define librarian and patron research preferences comparing CD-ROM, print, and online resources; track general trends in law library acquisition of CD-ROM databases; examine the degree of CD-ROM training offered in Ohio law libraries; chart the availability of CD-ROM publications on computer networks in Ohio law libraries; and document librarian opinions concerning the importance of print materials in an environment where duplicate electronic resources such as CD-ROM and online services are available. Research was conducted through a survey mailed to a population of Ohio law librarians. The literature review discusses the general characteristics of CD-ROM databases, the growth in the number of legal titles in CD-ROM format offered annually, and the results of a 1994 survey of CD-ROM usage in New York law libraries. Analysis of the data collected indicates that CD-ROM is widely and frequently used in Ohio law libraries; it is not used as frequently as print or online resources; there is an increasing trend to offer CD-ROM titles through computer networks to multiple users; librarians endorse retention of print holdings duplicated by CD-ROM; and librarians recognize that CD-ROM is steadily duplicating at least a portion of the print materials in their collections.

Master's Research Paper by

Scott Larson

B.A., Western Reserve College,
Case Western Reserve University, 1986
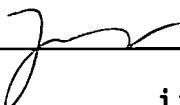
M.L.S., Kent State University, 1996

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CHAPTER I.   INTRODUCTION


A.   OBJECTIVES OF THE STUDY

The purpose of this study was to survey the opinions of librarians and patrons regarding their use of CD-ROM technology and publications in law libraries.  The specific problem addressed was whether the introduction into a law library of CD-ROM texts and the techniques of CD-ROM searching meet the information needs of librarians and endusers.  For all types of law libraries, use of CD-ROM remains a relatively recent phenomenon and its role in daily research activities must be further defined.  This study originated from recognition of the need to understand CD-ROM's role within the context of a law library operating in an environment where cost controls are emphasized yet demand for a high volume of accurate information is strong.

Law libraries serve a variety of patrons, including attorneys, paralegals, law students, administrative staff, and visitors from outside the organization.  All of these patrons must be guided by librarians to the best information resources that will serve their needs.  The rationale for this study was to provide a tool which could be used to measure librarians' and patrons' acceptance of CD-ROM, a new form of technology which allows searching through large quantities of text and retrieval of precise sections of text at a fixed cost, compare librarians' and patrons' acceptance of CD-ROM to their reliance upon print and online resources, and measure whether any trends exist concerning the availability of CD-ROM databases on computer networks for use by many simultaneous users.

In order to obtain answers to these questions, a survey was

distributed to librarians in Ohio academic, corporate, law firm, non-profit organization, and government law libraries asking them to identify whether their libraries had adopted usage of CD-ROM technology, whether the information available on CD-ROM had been added to computer networks, and to what degree use of CD-ROM resources had been accepted for the purpose of conducting research.

## B. DEFINITIONS OF TERMS

Law library: "Law library" is defined as a library operated by a public or private organization for the purpose of storing and making available legal research materials.

Law librarian: "Law librarians" are individuals who possess experience working in law libraries. Most law librarians have earned a Master of Library Science degree and many possess a Juris Doctorate as well. The law librarians targeted for this survey are employed in a variety of settings in Ohio libraries and generally perform reference assistance; mediated on-line and CD-ROM searching; bibliographic instruction; cataloging; collection management; and acquisitions. The patrons these librarians serve include attorneys, paralegals, law students, faculty, and other researchers who use the library.

CD-ROM Technology: The term "CD-ROM technology" refers to texts and databases which are commercially available to libraries in digital format and the devices which can deliver this digitally stored information. CD-ROM is viewed by some as a format that transcends the limitations of print and online research by allowing an individual to search a source's entire text repeatedly by

electronic means while limiting the costs of such research. A component of this study was measurement of the degree to which CD-ROM has been accepted as an alternative to print and online formats.

Print Publication: The term "print publication" refers to any information resource published in paper format.

Online database or online service: An "online database" is any computerized resource maintained by a business or organization which contains one or more databases, allows a researcher to input specific search terms, and then retrieves any text or data containing those terms. An "online service" is a commercial provider of access to online databases.

## C. LIMITATIONS OF THE STUDY

This study was limited to examining the views of law librarians concerning use of CD-ROM and measuring the progress CD-ROM technology has made as a format for storing and retrieving information accessed in law libraries. The respondents are members of the American Association of Law Libraries (AALL) and represent a cross-section of various types of Ohio law libraries. The responses from these librarians represent their views and observations. Because the pool of respondents was culled from the roster of membership of the AALL, there are responses from individuals who work in the same library.

## D. SIGNIFICANCE OF THE STUDY

The outcome of the study shows that librarians and patrons are satisfied with the CD-ROM materials and technology that have been introduced into their libraries. The outcome also shows that usage of these items is high. The study demonstrates that librarians and patrons have an affinity for using CD-ROM and have come to view it as a preferred research alternative compared to print resources. This survey is a reliable instrument for use by a law library considering entry into a new area of library technology.

## E. END PRODUCT

Included in this report is a detailed analysis of the participants' responses and a description of what their responses indicate. These findings may be submitted for publication to law library periodicals such as the American Association of Law Libraries' Law Library Journal and the Ohio Regional Association of Law Libraries' ORALL Newsletter. This report can act as an aid for librarians who are deciding whether to select CD-ROM equipment and titles for use by library patrons and staff. It can also assist librarians and library students who are studying recent trends in CD-ROM usage.

## CHAPTER II. <u>LITERATURE REVIEW</u>

### A.   GENERAL ASPECTS OF CD-ROM

A review of the literature reveals many of the appealing attributes of CD-ROM technology, all of which may be considered arguments for the integration of CD-ROM materials into a library collection. A CD-ROM disc is lightweight, easy to store, and can contain approximately 600 megabytes (or 600 million characters) of information (FN1). Information on one disc is the equivalent to three quarter tons of paper or 250,000 to 300,000 pages of text (FN2). It can contain as much as the contents of 20 four-drawer file cabinets, 1500 double-sided floppy discs or 50 10-MB hard discs (FN3). Replacement of print materials with CD-ROM titles possessing the same text allows for the conversion of hundreds of linear feet of library space for new purposes (FN4). Use of CD-ROM permits a researcher to accomplish in seconds what might have taken minutes or longer to locate if working with print materials (FN5). By obtaining licenses from publishers for multiple users, libraries may add CD-ROM databases to local area networks (LANs) or wide area networks (WANs), allowing users in the same office or offices in different geographic locations to have access to the same CD-ROM material simultaneously (FN6).

### B.   LEGAL DATABASES ON CD-ROM

Within a few years following the advent of CD-ROM technology, law librarians and publishers of legal texts began recognizing the

potential for use of CD-ROM materials by attorneys, law students, faculty and other researchers who frequent libraries. Between 1993 and 1994, the number of CD-ROM titles published for practicing attorneys and the law library market expanded 53% by increasing from 240 to 450 (FN7). The next year, in 1995, the number of CD-ROM databases for this market grew by 36% to 700 titles (FN8). The trend has continued into 1996, with 850 law-related titles, an 18% increase (FN9). The types of products available include federal and state statutes and administrative materials, legal forms, treatises covering diverse areas of practice, business and financial databases, and basic reference materials from other fields (FN10). To a lesser extent, law firms have also used CD-ROM to convert their files into electronic storage systems by using WORM (write once, read many) technology to transfer court documents, depositions, and other litigation texts to CD-ROM for future reference and economical storage (FN11). Some law firms acknowledge that the use of CD-ROM materials in the private law library has revolutionized their billing practices by allowing them to quote clients lower and more competitive rates for what had previously been costly, time-consuming research (FN12).

### C. STUDIES OF USAGE OF CD-ROM IN LAW LIBRARIES

Since the introduction of CD-ROM in the 1980s, research measuring librarians' attitudes and acceptance of the new technology and its adaptability has only occasionally been published (FN13). Most of the articles that have been published in law library journals and periodicals concerning CD-ROM usage in

private law libraries have focused on issues of proper selection of titles and equipment (FN14). Librarian and patron opinions concerning the integration of CD-ROM into the law library have been underexplored in the literature.

The leading research in the area of measuring the introduction and implementation of CD-ROM technology and materials in law libraries is a study conducted by Lawyers Cooperative Publishing (e.g. Lawyers Coop), a publisher which produces legal texts and CD-ROM titles, using a population of 100 law librarians in April, 1994 (FN15). The survey population consisted of librarians belonging to two professional organizations, the Law Libraries Association of Greater New York (LLAGNY) and the Association of Law Libraries of Upstate New York (AALLUNY) (FN16). The librarians surveyed worked in law firm, law school, court, and corporate law department libraries (FN17) As a side project, the same study was distributed nationwide on the Internet and responses were received from 23 out-of-state librarians (FN18). The researchers used a combination of surveys and personal interviews with respondents to gather data (FN19).

## D. RESULTS OF THE LAWYERS COOP STUDY

The Lawyers Coop study showed that 88% of the law libraries surveyed had CD-ROM research technology available to their patrons (FN20). Among those, 77% had fewer than 10 CD-ROM titles in their collection, while the remaining 11% had 12 to 75 CD-ROM titles (FN21). In the libraries that had CD-ROM, 64% of the respondents said that there had been a noticeable shift away from the use of print materials to on-line or CD-ROM research (FN22). Among the

librarians who stated that a shift had occurred, 67% noted that it had been toward on-line research, 5% toward CD-ROM research, and 28% commented that the former print-users were now relying on CD-ROM and on-line resources (FN23). Of the librarians surveyed, 17% said that they had observed a shift away from on-line research toward CD-ROM resources (FN24). When asked about patrons' work habits, the librarians stated that 61% of patron research is still conducted using print materials first, 29% said patrons' research is begun with on-line services, and 7% said research starts with CD-ROM technology (FN25). Most of the respondents' libraries (73%) offered electronic research training classes of some kind to their patrons (FN26). 87% of the respondents stated that for best results, researchers should rely on a combination of print, on-line, and CD-ROM resources to complete their work (FN27).

The majority of the librarians (76%) commented that they believed that their libraries would never completely eliminate books from their collections but a smaller group (11%) said that they believed that a time would eventually arrive when books were not needed in the law library (FN28). According to the respondents, the majority of research conducted in their libraries was performed by attorneys (57%), librarians (14%), law clerks (12%), library staff (7%), and paralegals (1%) (FN29). Lawyers Coop concluded that since a majority of the researchers in law libraries were attorneys, computerized research had been "overwhelmingly accepted" by them (FN30).

## E. SUMMARY OF THE LITERATURE

The literature indicates that CD-ROM technology promises many advantages to libraries. It is a space-efficient method of information storage that offers fixed costs for research. CD-ROM's capability of being accessed through a computer network and its electronic text-searching features allow for research to be conducted by many users quickly. The Lawyers Coop study establishes that CD-ROM is becoming increasingly important in law libraries to law librarians and endusers.

## CHAPTER III. <u>METHODOLOGICAL PROCEDURE</u>

Survey methodology was employed in this study. The survey focused on Ohio libraries because of the relative ease in contacting law librarians from the same region.

The population studied was 154 Ohio librarians who belong to the American Association of Law Libraries (AALL). Each librarian received a single survey to be filled out and returned. The general criteria for survey candidates was:

(a) membership in AALL;

(b) employment in a law firm library in Ohio.

After a mailing list of the survey recipients was prepared, the surveys were mailed. The librarians received:

    1) A cover letter explaining the purpose and intent of this study;

    2) A copy of the survey; and

    3) A self-addressed, stamped envelope for the return of the completed survey.

The cover letter contained a greeting to the librarian, an explanation of the study's purposes and goals, a guarantee of anonymity for all respondents, a description of how the study's results would be made available and directions regarding how the surveys should filled out. Addresses of survey candidates and other participants in the study were recorded in a computer spreadsheet detailing address, date of survey mailing, and date response was received.

The survey questions were intended to measure librarians' and patrons' experience using CD-ROM as a research tool and their preferences for CD-ROM research materials as compared to similar or duplicative resources available in print and/or on-line formats. The survey questions measured the users' likes and dislikes regarding CD-ROM as well as the reasons that formed their opinions. The questions were written with the goal of determining how much potential CD-ROM has to become as well-used as print and on-line materials and how it is being made available to endusers. The responses gathered from these questions will assist a law librarian to decide what course of action to pursue when confronted with the dilemma of whether or not to commit financial resources from print or on-line research budgets to the acquisition of CD-ROM.

After the surveys were collected, responses were coded and analysis of the data began. Forty-five days after the surveys were mailed to the participants, the fact-gathering period was considered concluded.

This report details the range of responses by the librarians surveyed and was produced following analysis of the data. For each question, the distribution of responses and the percentage this distribution reflects has been calculated. Chapter 4 presents a table of statistics for virtually every question in the survey. Interpretation of these statistics follows in Chapter 5.

CHAPTER IV.   ANALYSIS OF THE DATA


A.   RESPONDENTS

A total of 154 questionnaires were mailed or hand-distributed to librarians affiliated with Ohio law libraries.  Of this number, 90 questionnaires were returned over a seven-week period.  Reminder cards were not sent to the target population after the original mailing.   The response rate was 58%.


B.   RESPONDENTS' LIBRARY AFFILIATION

The respondents represent six general types of Ohio law libraries.   The types of libraries represented in this survey are as follows:

Table 1.   Type of law library (Data for question #1)

|                          | Number | Percentage |
|--------------------------|--------|------------|
| Law firm                 | 32     | 36%        |
| Academic                 | 26     | 29%        |
| Government               | 22     | 24%        |
| Non-profit organization  | 7      | 8%         |
| Corporate                | 1      | 1%         |
| Other                    | 2      | 2%         |
|                          |        |            |
| Total:                   | 90     | 100%       |


C.   PRESENCE OF CD-ROM IN THE LIBRARY

CD-ROM databases are available in virtually all of the libraries respondents are affiliated with.

Table 2. Library owns/subscribes to 1 or more CD-ROM titles (Data for question #2)

|  | Number | Percentage |
|---|---|---|
| Yes | 86 | 96% |
| No | 4 | 4% |
| Total: | 90 | 100% |

Table 3. Library plans to acquire CD-ROM titles in the future if none are currently owned (Data for question #3)

|  | Number | Percentage |
|---|---|---|
| Yes | 4 | 100% |
| No | 0 | 0% |
| Total: | 4 | 100% |

D.   EXPLANATIONS FOR DECISIONS NOT TO ACQUIRE CD-ROM TITLES

The 4 respondents whose libraries do not have CD-ROM materials offered a variety of reasons for this situation.

Table 4. Reasons CD-ROM titles are not owned/subscribed to (Data for question #4)

|  | Number | Percentage |
|---|---|---|
| Cost | 2 | 22% |
| Online resources fulfill same needs | 2 | 22% |
| CD-ROM less accessible to patrons than print and online resources | 2 | 22% |
| Other reasons (qualitative responses): |  |  |
| Equipment incompatibility | 1 | 11% |
| Lack of space | 1 | 11% |
| Reluctance of patrons to use CD-ROM | 1 | 11% |
| Total: | 9 | 99% |

Three of the four librarians whose libraries do not currently

own or subscribe to CD-ROM titles indicated that CD-ROM resources would be added to their library's holdings in the future. The fourth librarian was not sure whether CD-ROM resources would ever be added. Of the three librarians who expected to add CD-ROM resources to the collection, one expected to acquire them within six months, one expected to acquire them in one year, and one expected to acquire them within two years. (This is a summary of data for question #5).

### E. PERSONAL AND OBSERVED PREFERENCES REGARDING USAGE OF CD-ROM

The survey contained several questions intended to measure the respondents' preferences for using CD-ROM, online, print, and other materials. A related set of questions was also included that addressed librarians' observations of trends in patron preferences regarding CD-ROM, online, and print use.

Table 5. Frequency of use of CD-ROM by respondents
(Data for question #6)

|  | Number | Percentage |
|---|---|---|
| Daily | 57 | 63% |
| Weekly | 23 | 26% |
| Monthly | 5 | 6% |
| Never | 3 | 3% |
| Not sure | 2 | 2% |
| Total: | 90 | 100% |

The focus of this question was how often the respondent used CD-ROM materials.

Table 6.  Observed frequency of use of CD-ROM by patrons
(Data for question #7)

|  | Number | Percentage |
|---|---|---|
| Daily | 72 | 80% |
| Weekly | 12 | 13% |
| Monthly | 3 | 3% |
| Never | 1 | 1% |
| Not sure | 2 | 2% |
| Total: | 90 | 99% |

This question asked the respondent how frequently he or she

had observed library patrons using CD-ROM materials.

Table 7.  Information resources most preferred by respondents
(Data for question #8)

|  | Number | Percentage |
|---|---|---|
| Online | 42 | 42% |
| Print | 33 | 33% |
| CD-ROM | 17 | 17% |
| Not sure | 7 | 7% |
| Total: | 99 | 99% |

Respondents were asked which type information resource they

generally preferred to use.  (Note:  Several respondents entered

multiple answers to this question, thus skewing the results).

Table 8.    Information resource formats observed to be most
preferred by patrons (Data for question #9)

|  | Number | Percentage |
|---|---|---|
| Print | 57 | 58% |
| Online | 25 | 26% |
| Not sure | 10 | 10% |
| CD-ROM | 6 | 6% |
| Total: | 98 | 100% |

This question focused on which type of information resource

patrons seemed to generally prefer to use.  (Note:  Several

respondents entered multiple answers to this question, thus skewing the results).

Table 9.    Respondents' estimation of CD-ROM and online usage preferences of all library researchers (i.e. patrons and librarians) (Data for question #10)

|  | Number | Percentage |
|---|---|---|
| Online resources used most often | 44 | 53% |
| CD-ROM resources used most often | 23 | 28% |
| Both used equally as much | 9 | 11% |
| Not sure which is used more often | 6 | 7% |
| Not applicable | 1 | 1% |
| Total: | 83 | 100% |

The respondents were asked to estimate which type of electronic information service, online or CD-ROM, was used most often by librarians and patrons (i.e. which information format is used the most by all researchers in the library).

Table 10.  Resource respondents would use first if document needed were available in print, online, and CD-ROM formats (Data for question #22)

|  | Number | Percentage |
|---|---|---|
| CD-ROM | 32 | 38% |
| Print | 27 | 32% |
| Online | 16 | 19% |
| Not sure | 9 | 10% |
| Total: | 84 | 99% |

This question focused on which resource a respondent would prefer to use if he or she knew that the document needed could be obtained in any of the three information resource formats.

Table 11.  Resource respondents would use first if the format of an urgently needed document was unknown (Data for question #23)

|  | Number | Percentage |
|---|---|---|
| Online | 45 | 54% |
| CD-ROM | 22 | 26% |
| Print | 10 | 12% |
| Not sure | 6 | 7% |
| Not applicable | 1 | 1% |
| Total: | 84 | 100% |

The respondents were asked which type of resource they would check first if they did not know for certain where an urgently needed document had been published.

Table 12.  Respondents' estimate of which resource a patron would use first if the format of an urgently needed document was unknown (Data for question #24)

|  | Number | Percentage |
|---|---|---|
| Consult librarian | 45 | 50% |
| Online | 18 | 20% |
| Print | 14 | 15% |
| Not sure | 7 | 8% |
| CD-ROM | 6 | 7% |
| Total: | 90 | 100% |

The respondents were asked which information source a patron would consult first if the patron needed a document urgently and did not know where it had been published.

F.  FUTURE ACQUISITION TRENDS, TRAINING, AND AVAILABILITY
OF CD-ROM RESOURCES ON A NETWORK

Table 13.  Trend of respondents' libraries' acquisition of CD-ROM
titles in the next year (Data for question #11)

|                                                    | Number | Percentage |
|----------------------------------------------------|--------|------------|
| More CD-ROM titles will be acquired                | 64     | 75%        |
| Same number of CD-ROM titles will be acquired      | 10     | 12%        |
| Not sure how many CD-ROM titles will be acquired   | 6      | 7%         |
| Fewer CD-ROM titles will be acquired               | 3      | 4%         |
| No CD-ROM titles will be acquired                  | 2      | 2%         |
| Total:                                             | 85     | 100%       |

This question focused on respondents' estimate of whether
their libraries would increase, decrease, or not alter their rate
of acquiring CD-ROM materials.

Table 14.  Whether instruction in use of CD-ROM resources has been
offered in respondents' libraries (Data for question #12)

|                 | Number | Percentage |
|-----------------|--------|------------|
| Yes             | 70     | 82%        |
| No              | 11     | 13%        |
| Not applicable  | 4      | 5%         |
| Total:          | 85     | 100%       |

Respondents were asked whether their library had offered
training in the use of CD-ROM materials.

Table 15. Number of training sessions offered in respondents' libraries' (Data for question #13)

|  | Number | Percentage |
|---|---|---|
| 1 session | 11 | 15% |
| 2 sessions | 4 | 6% |
| 3 sessions | 5 | 7% |
| 4 sessions | 3 | 4% |
| 5 sessions | 2 | 3% |
| 6 sessions | 1 | 1% |
| 8 sessions | 1 | 1% |
| 9 sessions | 2 | 3% |
| 10 sessions | 4 | 6% |
| 20 sessions | 3 | 4% |
| Depends on need of user | 20 | 28% |
| No training was offered | 15 | 21% |
| Total: | 71 | 99% |

Respondents were asked to state approximately how many CD-ROM training sessions had been offered.

Table 16. CD-ROM training in respondents' libraries' has been performed by: (Data for question #14)

|  | Number | Percentage |
|---|---|---|
| Representatives of the vendors | 50 | 53% |
| Librarians or library staff | 41 | 43% |
| Member of MIS department or other non-library employee | 4 | 4% |
| Total: | 95 | 100% |

Respondents were asked who had performed training in the use of CD-ROM materials in the library they are affiliated with. Respondents recorded multiple responses to this question. Many commented that vendor representatives trainedv the librarians and library staff were trained to use CD-ROM resources but the librarians were responsible for training the patrons.

Table 17.  CD-ROM titles are accessible on a computer network
(Data for question #15)

|  | Number | Percentage |
|---|---|---|
| Yes | 45 | 54% |
| No | 38 | 46% |
| Total: | 83 | 100% |

This question sought to establish how many of the respondents
were using CD-ROM materials on a network.

Table 18.  Estimation of the forseeable time that CD-ROM titles
will be available for use on a computer network if respondents'
libraries' do not yet have CD-ROM networking capability (Data for
question #16)

|  | Number | Percentage |
|---|---|---|
| In the next 3 months | 3 | 8% |
| In the next 6 months | 3 | 8% |
| In 1 year | 5 | 13% |
| In 2 years | 6 | 15% |
| Never | 4 | 10% |
| Not sure | 18 | 46% |
| Total: | 39 | 100% |

The intent of this question was to detemine what respondents'
expectations were concerning the future implementation of a CD-ROM
network in their library.

Table 19.  Type of network used (Data for question #17)

|  | Number | Percentage |
|---|---|---|
| LAN (Local Area Network) | 32 | 64% |
| WAN (Wide Area Network) | 18 | 36% |
| Total: | 50 | 100% |

The purpose of this question was to ask respondents to
distinguish which type of network their library is using or would
use in the future.  The results reflect responses from respondents

whose libraries are currently networking CD-ROM titles and respondents whose libraries are not presently doing so but plan to in the future.

Table 20.  The maximum number of individuals who may access a CD-ROM title through the network is: (Data for question #18)

|  | Number | Percentage |
|---|---|---|
| 1 person | 1 | 2% |
| 2 persons | 2 | 4% |
| 3 persons | 4 | 9% |
| 4 persons | 7 | 15% |
| 5 persons | 3 | 7% |
| 8 persons | 3 | 7% |
| 10 persons | 2 | 4% |
| 15 persons | 1 | 2% |
| Depends on the license | 12 | 26% |
| Not sure | 11 | 24% |
| Total: | 46 | 100% |

The purpose of this question was to establish roughly how many simultaneous users the respondent's library's network can accomodate or will be able to accomodate.

Table 21.  Type of technology used to network CD-ROM titles (Data for question #19)

|  | Number | Percentage |
|---|---|---|
| CD-ROM tower or towers | 41 | 76% |
| Downloading CD-ROM data onto computer hardrives | 8 | 15% |
| CD-ROM jukebox | 5 | 9% |
| Total: | 54 | 100% |

The respondents were asked to identify which general type of networking device or strategy was being used by their library for CD-ROM materials.

## G.  OPINIONS CONCERNING IMPORTANCE OF PRINT PUBLICATIONS IN LIBRARIES WHERE DUPLICATE ELECTRONIC MATERIALS ARE AVAILABLE

Table 22.  Whether respondents' libraries' have continued to maintain subscriptions to print materials that are duplicated by CD-ROM titles (Data for question #20)

|  | Number | Percentage |
|---|---|---|
| Yes | 78 | 89% |
| No | 9 | 10% |
| Not applicable | 1 | 1% |
| Total: | 88 | 100% |

This question is intended to determine whether at least some subscriptions to print materials duplicated by CD-ROM have been maintained.

Table 23.  Respondents' opinions concerning whether duplicated print titles should be removed from a library's shelves once CD-ROM versions are acquired (Data for question #21)

|  | Number | Percentage |
|---|---|---|
| Yes | 21 | 25% |
| No | 42 | 49% |
| Not sure | 22 | 26% |
| Total: | 85 | 100% |

The purpose of this question is to measure the respondents' attitudes concerning retention of print materials when duplicate electronic versions are available.

Table 24. Respondents' opinions concerning whether CD-ROM and online resources are likely to replace a portion of the print materials in respondents' libraries (Data for question #26)

|  | Number | Percentage |
|---|---|---|
| Yes | 79 | 95% |
| No | 1 | 1% |
| Not sure | 3 | 4% |
| Total: | 83 | 100% |

This question asks the respondents to engage in some "forecasting" concerning the fate of duplicated print materials in their libraries.

Table 25. Respondents' opinions concerning whether CD-ROM and online resources are likely to completely replace print materials in respondents' libraries (Data for question #25)

|  | Number | Percentage |
|---|---|---|
| Yes | 2 | 2% |
| No | 75 | 92% |
| Not sure | 5 | 6% |
| Total: | 82 | 100% |

This is a similar "forecasting" style of question.

## Chapter 5:   SUMMARY AND CONCLUSIONS

### A.   PREFERENCES REGARDING USE OF CD-ROM

As acknowledged by virtually all of the survey's participants, CD-ROM technology has become a facet of law library services which competes with the print and online formats.   The competetion between formats is perceived on several levels:   CD-ROM titles and equipment represent another category of costs that must be tracked within a library budget; the CD-ROM format is a relatively new type of publication offering materials that have previously been accessible chiefly in the print and online formats; and use of CD-ROM, like use of print and online resources, must also be promoted or taught to library patrons in order for the information it stores to be accessed.   This survey reveals the conflicts in preferences that arise when librarians and patrons are presented with different methods of obtaining the information they need.

CD-ROM titles can be found in almost all Ohio law libraries. 96% of the respondents indicated that the library they are affiliated with owns one or more CD-ROM titles.   According to the survey results, 63% of the respondents use CD-ROM databases at least once a day and 26% use them at least once a week.   These librarians estimated that their patrons use CD-ROM databases quite often also; 80% stated that patrons use CD-ROM services daily and 13% stated that patrons use them weekly.   On the surface, these usage statistics are impressive.

These high usage figures, however, are in marked contrast to

the librarians' responses concerning which information format they and their patrons most prefer to use. Despite stating that CD-ROM resources are used frequently, the number of librarians who ranked CD-ROM publications as the resource they used most frequently for research fell far below the number of librarians who ranked online services or print materials as the resources used most often. 42% of the respondents stated that they used online services most often, 33% said they used print resources most often, and only 17% said that they used CD-ROM resources most often. CD-ROM faired even worse when librarians were asked what type of information resource they had observed their patrons using most frequently. 58% of the respondents observed that patrons used print most frequently, 26% said that patrons used online services most frequently, 10% said that they were uncertain which resource patrons used most often, and only 6% said that patrons used CD-ROM resources more often than any others. These figures closely match the results of the 1994 Lawyers Coop Study, which found that 61% of library research is conducted with print materials, 29% with online resources, and only 7% with CD-ROM publications. Clearly CD-ROM, although used frequently, is not the most preferred resource in the library and probably serves primarily as an adjunct resource to print and online materials.

When the survey participants were asked to identify which information format they would refer to first if they knew a document could be obtained in any of the three formats, a slim majority (38%) of the respondents stated that they would check CD-

ROM first while 32% said they would first go to a print resource and 19% said that the first resource they would check would be online. If the respondents did not know which format an urgently needed publication could be found in, 58% said they would check an online service first, 26% said they would check a CD-ROM database first, and 12% said that they would look in a print resource first. When asked what source a patron would check first when a document was urgently needed, 50% of the respondents said that the patron would be most likely to first consult a librarian, 20% said that the patron would first check an online database, 15% stated that the patron would start with a print resource, 8% said they did not know which resource a patron would turn to first, and 7% said that the patron would begin with a CD-ROM database.

These statistics reinforce the suggestion that CD-ROM technology's current role in the law library is to serve as a compliment to print and online resources. CD-ROM databases are useful enough to be relied on regularly by librarians and library patrons, but these statistics indicate that CD-ROM databases are not used for the bulk of research conducted in the library and are not used in an "emergency" research situation. These results echo the Lawyers Coop Study's finding that 87% of law librarians recommend conducting legal research with a combination of print, online, and CD-ROM materials. This study does not address some of the physical limitations concerning the speed at which information can be retrieved and printed from CD-ROM, but this factor may be influential librarians' and patrons' decision to consult other

resources before CD-ROM.

B.  CD-ROM ACQUISITIONS, TRAINING, AND NETWORK USE

Libraries are adding more CD-ROM databases to their collections.  75% of the respondents predicted that they will be purchasing more CD-ROM titles in the next year while 12% said that they would purchase the same amount that they had purchased this year.  Only 4% stated that they would purchase fewer CD-ROM titles next year.  These statistics reflect the continuing growth of the CD-ROM publishing industry.

The amount of training in the use of CD-ROM resources varies widely from library to library, but the general trends shown by the respondents' answers are that training usually takes the form of a handful of sessions run by a librarian or vendor's representative with subsequent training for patrons on an "as needed basis." While 82% of the respondents stated that their libraries had offered patrons training in the use of CD-ROM, 13% indicated that their library had offered no training for patrons.  These results closely match those of the Lawyers Coop study, which found that 73% of law libraries surveyed had offered some type of training in the use of CD-ROM to library patrons.  In this survey, 15% of the respondents stated that only one training session had been offered, small percentages indicated that between 2 and 20 training sessions had been offered, and 28% said that training was provided strictly on an "as needed basis."  Some of the respondents commented that

training was offered when a patron's question warranted it and many considered it to be an extension of reference service.

A growing number of libraries are making CD-ROM titles available to patrons through computer networks. 54% of the respondents indicated that the library they are affiliated with was offering CD-ROM titles on a network and an additional 36% of the respondents stated that their libraries' would begin networking CD-ROM materials within the next 3 months to 2 years. Of those responding that their library is currently networking CDs or will eventually network them, 64% said that the type of network in use is a LAN (Local Area Network) and 36% said that a WAN (Wide Area Network) is in use. The number of librarians who indicated that their library offers CD-ROM through a WAN hints that libraries may one day eliminate providing CD-ROM access at a single site on a LAN and will instead offer CD-ROM databases to patrons in diverse geographic locations. The devices used to network CD-ROM titles in these libraries are primarily CD-ROM towers. 76% of the respondents stated that their libraries are using towers, 15% said that they are downloading CD-ROM databases onto multiple computer hard-drives, and 9% said that their libraries are using CD-ROM jukeboxes.

Because these figures represent the responses of a group of Ohio law librarians, they cannot be interpreted to represent the number of Ohio law libraries that are engaging in CD-ROM networking activities. However, the large number of respondents answering that their library has established some kind of CD-ROM network

leads to the conclusion that most Ohio law libraries have either formed a CD-ROM network for their patrons or are considering doing so. In the Lawyers Coop study, the percentage of New York law libraries networking CD-ROM publications was 28%. The percentage of Ohio law libraries engaged in networking CD-ROM titles should be considered to be greater than this figure.

## C. OPINIONS CONCERNING IMPORTANCE OF PRINT MATERIALS

The majority of respondents believe that print materials are not losing their usefulness despite the existence of online and CD-ROM resources that can duplicate the contents of print texts. 89% of the respondents stated that their libraries had continued to maintain subscriptions to print publications which are duplicated by CD-ROM titles, a significant contrast to the 10% who said that their libraries had not continued to maintain print subscriptions that overlapped with CD-ROM titles. The respondents were more divided when asked whether a library should remove from its shelves print materials that are duplicated by CD-ROM resources. 49% said that the duplicated print titles should not be removed, 25% said that duplicated print titles should be removed, and 26% were not sure whether duplicate titles should be removed or not. The respondents, however, were nevertheless confident that CD-ROM materials will replace a portion of the materials in their libraries. 95% agreed that some print materials will be replaced by CD-ROM, while only 1% indicated that CD-ROM would not replace any print materials. 92% disagreed that CD-ROM materials could

completely replace all materials in their libraries while 2% agreed that print materials could replace all print titles in the collection. These responses reflect a belief among the librarians participating in this study that print materials will continue to have an important role in the research conducted in law libraries for some time to come. Most of the respondents indicated that they are presently reluctant to discard print titles that are completely duplicated by CD-ROM databases but most recognized that CD-ROM was capable of replacing at least a portion of the holdings in their collections.

## D. CONCLUSION

This is a transitional era between print and electronic resources, but it is difficult to determine which information format, print or CD-ROM, is the transitional one. The respondents in this survey demonstrated that CD-ROM is an important part of their libraries' resources but could not show that it has eclipsed print or online services in the degree to which it is used. Furthermore, while user access to CD-ROM databases is generally increasing through various types of computer networks, librarians show that they are divided on what course to follow concerning retention of duplicated print holdings. The importance of CD-ROM publications in law libraries has been demonstrated; the question of whether CD-ROM's role will continue to expand in legal research must be determined through continuing research.

APPENDIX

School of Library and Information Science
(216) 672-2782
Fax 216-672-7965

**Kent** STATE UNIVERSITY

P. O. Box 5190. Kent. Ohio 44242-0001

Re: Usage of CD-ROM in law libraries

January 24, 1996

Dear Librarian:

I am a graduate student in the School of Library and Information Science at Kent State University. As part of the requirements for my master's degree I am conducting a study about the use of CD-ROM in law libraries. The enclosed questionnaire elicits information that will assist me in learning how CD-ROM technology and materials are meeting the information needs of law libraries. This information would be useful to both theorists and practitioners in the field of library and information science.

Confidentiality and anonymity are guaranteed as you do not need to sign your name to individual questionnaires; only the investigator has access to the survey data. There is no penalty of any kind if you should choose not to participate in this study or if you would withdraw from participation at any time. While your cooperation is essential to the success of this study it is, of course, voluntary. A copy of the results will be available upon request.

If you have any questions, please contact me at (216) 229-1033 or Dr. Marcia Zeng, my research advisor, at (216) 672-2782. If you have any questions about Kent State University's rules for research, please call Dr. M. Thomas Jones at (216) 672-2851.

Thank you very much for your cooperation; it is much appreciated. You may return the questionnaire in the enclosed self-addressed stamped envelope to me at this address:

Scott Larson
2412 Euclid Heights Blvd., #205
Cleveland Heights, OH 44106

Sincerely,

Scott Larson,
Graduate Student

SURVEY INSTRUMENT:   USAGE OF CD-ROM IN OHIO LAW LIBRARIES

Please answer each question using the response that best describes your library.

1)   Please select the category representing the type of law library you are affiliated with:

    a)   Academic law library
    b)   Corporation law library
    c)   Law firm library
    d)   Non-profit organization law library
    e)   Government law library
    f)   Other

2)   Does your library maintain subscriptions to or own one or more CD-ROM titles?

    a)   Yes ---> Proceed to questions 6-26
    b)   No  ---> Proceed to questions 3-5
    c)   Not applicable ---> Proceed to questions 3-5

3)   If you answered "no" or "not applicable" to question #2, do you foresee that there will be a time when your library will purchase or subscribe to CD-ROM titles?

    a)   Yes
    b)   No
    c)   Not sure

4)   If CD-ROM titles have not been added to your library's collection, what would you say has been the most decisive factor against adding them?

    a)   Cost
    b)   Available CD-ROM databases are not adequate for the needs of the patrons
    c)   On-line resources fulfill the same needs for the library that CD-ROM would fulfill
    d)   Patrons would not have the same degree of access to CD-ROM materials that they do with print or online resources
    e)   Other (please specify) _____
    f)   Not applicable

5)   When would you predict the introduction of CD-ROM titles and materials into the library will occur?   (Example:   in 6 months, in 1 year)

    a)   In _____
    b)   Not sure
    c)   Not applicable

DO NOT PROCEED IF YOUR LIBRARY DOES NOT USE CD-ROM MATERIALS

ANSWER QUESTIONS 6-26 IF YOUR LIBRARY USES CD-ROM MATERIALS

6)  How often do you use your library's CD-ROM materials?
    (Example:  on a daily basis, on a weekly basis)

    a)  _____
    b)  Never
    c)  Not sure
    d)  Not applicable

7)  How frequently are CD-ROM materials used in your library by
    attorneys, paralegals, faculty, students, and other
    researchers who are not librarians?  (Example:  on a daily
    basis, on a weekly basis)

    a)  _____
    b)  Never
    c)  Not sure
    d)  Not applicable

8)  Which type of information resource do you use the most when
    conducting research?

    a)  CD-ROM
    b)  Online
    c)  Print
    d)  Not sure

9)  Which type of information resource is used most in your
    library by attorneys, paralegals, faculty, students, and other
    researchers who are not librarians?

    a)  CD-ROM
    b)  Online
    c)  Print
    d)  Not sure

10) How would you compare use of CD-ROM materials and online
    resources by all researchers in your library (including
    librarians, attorneys, paralegals, faculty, and students):

    a)  CD-ROM resources are used most often
    b)  Online resources are used most often
    c)  Both resources are used equally as much
    d)  Not sure which is used more often
    e)  Not applicable

11) What will be the trend for your library concerning acquisition of CD-ROM titles during the next year?

   a) More CD-ROM titles will be purchased or subscribed to
   b) Fewer CD-ROM titles will be purchased or subscribed to
   c) The same number of CD-ROM titles will be purchased or subscribed to
   d) No CD-ROM titles will be purchased or subscribed to
   e) Not sure

12) Have there been any training sessions in your library intended to instruct how CD-ROM is used?

   a) Yes
   b) No
   c) Not applicable

13) If training sessions have been offered, how many were there? (Example: one session, two sessions)

   a) _____
   b) Not sure
   c) Not applicable

14) If training has been offered, who performed it?

   a) Librarians
   b) A representative of the vendor who sold the CD-ROM materials to the library
   c) A consultant
   d) A staff member employed by a department other than the library (such as the MIS department)
   e) Other (please specify) _____
   f) Not applicable

15) Are any of your library's CD-ROM titles accessible on a computer network?

   a) Yes
   b) No
   c) Not applicable

16) If your library's CD-ROM titles are not accessible on a computer network, can you predict when they will be networked? (Example: in 6 months, in one year)

   a) In _____
   b) Never
   c) Not sure
   d) Not applicable

17) If CD-ROM titles are networked, are they available on a network accessed in a single geographic location (a LAN, or Local Area Network) or are they available on a network serving multiple geographic locations (a WAN, or Wide Area Network)?

a)   Single location (LAN)
b)   Multiple locations (WAN)
c)   Not applicable

18) If CD-ROM titles are networked, what is the maximum number of individuals who may access a CD-ROM title through the network? (Example:  one person, five people, ten people)

a)   _____
b)   Not sure
c)   Not applicable

19) What form of technology is being used to offer CD-ROM titles on a network?

a)   CD-ROM tower or towers
b)   CD-ROM jukebox
c)   Downloading CD-ROM data onto computer hard-drives
d)   Other (please specify) _____
e)   Not applicable

20) Has your library continued to maintain subscriptions to print titles that are duplicated by CD-ROM titles?

a)   Yes
b)   No
c)   Not applicable

21) Should duplicated print titles be removed from a library's shelves once CD-ROM versions are purchased or subscribed to?

a)   Yes
b)   No
c)   Not sure

22) If you had to quickly locate a document that you knew could be found in your library using CD-ROM, online, or print resources, which would you use first?

a)   CD-ROM
b)   Online
c)   Print
d)   Other
e)   Not sure
f)   Not applicable

23) If you were <u>not</u> certain where the document could be found but still needed to find it quickly, which resource would you use first to look for it?

    a)   CD-ROM
    b)   Online
    c)   Print
    d)   Other
    e)   Not sure
    f)   Not applicable

24) If an attorney, paralegal, faculty-member, or student were conducting research in your library and needed to quickly locate a document, which would he or she be likely to check first?

    a)   CD-ROM
    b)   Online
    c)   Print
    d)   Consult librarian
    e)   Other
    f)   Not sure
    g)   Not applicable

25) Do you feel that CD-ROM and online resources may eventually completely replace print materials in your library?

    a)   Yes
    b)   No
    c)   Not sure
    d)   Not applicable

26) Do you feel that CD-ROM and online resources would be more likely to replace only a portion of the print materials in your library?

    a)   Yes
    b)   No
    c)   Not sure
    d)   Not applicable

    Please feel free to add additional comments below:

    _____

    _____

    _____

    _____

THANK YOU FOR PARTICIPATING IN THIS SURVEY

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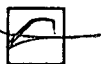    Can Put a Small Firm on Top."  Texas Lawyer, 6 December 1993,
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