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ABSTRACT

This report assesses the impact of instruction in online bibliographic database searching on high school students' use of library materials and facilities in three Delaware secondary schools (one public, one parochial, and one private) during the spring of 1984. Most students involved in the analysis were given a brief explanation of online bibliographic searching and instruction in search strategy. They were encouraged to prepare a search request for the topic they had selected for their research assignment. The databases used were selected by a professional librarian. Completed searches, containing documents of potential use to the students, were returned to the students. A critical incident analysis was conducted on the following data: copies of the bibliographies of the student papers (132); questionnaires completed by students in class at the time assignments were due (175); records of student searches (111); and interviews with cooperating school library media specialists (7 teachers and 3 librarians). Following an introduction, discussion of rationale, and description of evaluation design, this report presents observations and implications from data analysis on the following topics: student use of facilities; student material preferences; school library role in delivering documents; age of books used; currency of magazines used; focus of magazine use; use of online references; currency of online references; the most heavily used database; and cost of online searching. Sections on clarifying educational objectives and a summary and recommendations are included. Numerous appendices and tables support the research report. (THC)

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HIGH SCHOOL STUDENTS, LIBRARIES, and the SEARCH PROCESS

An Analysis of Student Materials and Facilities Usage Patterns in Delaware Following Introduction of Online Bibliographic Database Searching

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November 12, 1984

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INTRODUCTION

This report describes the materials and library facilities that students used following instruction in and introduction of online bibliographic database searching in three Delaware secondary schools during the spring of 1984. School settings chosen for this analysis were ones with strong administrative support for their libraries, a history of close working relationships between teachers and librarians, and in which librarians were willing to devote time and effort to this project without remuneration. In addition, the schools selected (William Penn High School, Archmere Academy and Tower Hill School) represented public, parochial and private settings.

The purpose of this study was to describe how putting students in touch with bibliographic information electronically may effect what they do and what libraries can do for them. This is an important consideration at a time when task forces are studying ways to promote library cooperation in Delaware that will cross institutional boundaries. Policies and systems developed should take into consideration demonstrated patterns of library use by specific user groups, such as those in this study. In order to consider how actual patterns of use can be enhanced through cooperation. In order to do this it is essential to know what users are currently doing and how technological developments are effecting their use of specific facilities and materials. In order to assess this, a small number of critical incidents were examined for their impact on student use of libraries and library materials.

At the time that contact was made with the project consultant it was anticipated that:

- all essential equipment for online searching would be in place in each of the schools to be studied;
- the cooperating librarians would have completed training in online searching;
- student instruction in the online process would be conducted; and
- students to be studied would have the opportunity to engage in online bibliographic database searching in order to meet the demands of the particular assignments selected for analysis.

A preliminary meeting for the participating librarians was held at Drexel University, College of Information Studies on March 16, 1984. At that time the objectives of the study were presented; findings from similar studies of students in other locations were discussed; the sample classes from each school were initially chosen; and the data collection procedures were distributed in writing and discussed. Late spring was selected as the appropriate time to gather and analyze data from sample classes. All arrangements for equipment and training were to be organized locally. (See Appendix A for Instructions for Cooperating Librarians.)

In June 1984, the consultant visited each of the cooperating schools and collected the bibliographies of student papers, searches and questionnaires that would be analyzed. At that time, each of the cooperating librarians was interviewed and any problems associated with the study were identified. Major problems and changes in procedure that affected the analysis included:

- delays in equipment installations caused delays in librarian training and meant that most student instruction, regardless of school, was developed and supervised by Carrol McCarthy and Nancy Minnich of Tower Hill at the other school sites.
- the decision was made to teach students search strategy in preparation for an online search but to have the searches performed by a librarian located at one of the cooperating schools, rather than by the students themselves.

These changes in the local procedures created an instructional model for analysis that differed in part from the one for which the data collection instruments were originally designed. This was taken into consideration in doing the data analysis and will be discussed at appropriate points throughout this report.

RATIONALE

Various areas of concern must be addressed in assessing the impact of online searching on student use of library materials and library facilities.

Most importantly, evaluation must examine what students do as a result of the instruction they receive from teachers and librarians when online bibliographic database access is incorporated into library skills programs as an addition to instruction in basic manual library skills. What materials do students use in their assignments as a result? Which libraries or other facilities do they use in locating the material that is referenced online? Which databases are most suitable for student information needs? What does this type of access cost? What implications does it have for cooperation among area librarians?

Outcomes of electronic searching may have an impact on materials students seek in libraries. By looking at broad patterns of references retrieved, and patterns of references used, evaluation will reveal how collecting practices could change to support demonstrated use; how weeding might remove materials that are inappropriate because of age or obsolete content; and how area libraries that serve students could focus on cooperative strategies that would improve access.

EVALUATION DESIGN

Data Sources

The evidence for the evaluation suggested above came from examination of what students actually did in response to specific assignments. Students included in this analysis were given, in most instances, a brief explanation of online bibliographic searching and instruction in search strategy. They were encouraged to prepare a search request for the topic they had selected to research for their assignment. (See Appendix B for a copy of the search form used by students and Appendix C for a list of student topics.) The databases used were selected by a professional librarian in the school that provided the training. Completed searches, containing potential documents of utility to them, were returned to the students. In one school, references available from the school library collection were marked as such on the copy of the search returned to the student.

The following critical incident data were collected for analysis:

1. Copies of the bibliographies of the student papers

Analysis of the references in the bibliographies addressed the number, type and age of materials used, as well as describing the characteristics of the references that came from the student's online search. (A copy of the search, if one was performed, was attached to the bibliography.)

Students also indicated on the copies of their bibliographies where materials referenced had been located. Students were not told in advance about this aspect of the analysis. These data were obtained in classes at the time the questionnaires were administered (i.e., when assignments were due.)

2. Questionnaires completed by students in class at the time assignments were due. (See Appendix D for a copy of the questionnaire.)

Analysis of questionnaires indicates the type of facilities used to locate references in papers and the type and degree of help received. This document also solicited answers to questions regarding use of computers to search for information online, and any special ways students gathered information.

Note: The section of this questionnaire addressing use of computers in the search process was developed to query individuals who performed their own online searches. Because of equipment and training problems that developed on site the instructional searching model was changed; therefore, this part of the questionnaire was not considered in the analysis.

3. The records of student searches

All students who prepared an online search request had their searches conducted by a professional librarian at Tower Hill School,

using the search strategy prepared by the student. Completed searches were returned to students and were then attached to the copies of their bibliographies and collected in class at the time the assignments were due. Analysis of these search records described the number, type, and age of references retrieved. (More importantly, student bibliographies were also examined for the presence of any references suggested by the online search.)

4. Interviews with cooperating school library media specialists

These interviews provided data on the librarian's role in supporting the assignments being studied; the librarian's preparation for introducing online searching; opinions on the impact computerized database access would have on services to students; and the preparation and interest shown by teachers for the incorporation of online bibliographic database access into student training. This interview also provided an opportunity to gather information on how materials are selected for the cooperating school libraries, with particular emphasis on the selection and retention of magazines. Data on budgets and hours of service were also included.

Data Analysis Procedures

- 1 Analysis of the student bibliographies began with classifying and coding the entries on a paper-by-paper basis. The information collected included:

Type of materials -- books, magazines, encyclopedias, pamphlets, etc. The number of each type as well as the total number of references was recorded.

Age of materials -- oldest date, most recent date and median date were recorded for the entire student bibliography and for each type of material.

Special characteristics--these included, but were not limited to, the number of different magazine titles used, as well as the number of magazine references which were indexed by The Readers Guide to Periodical Literature.

Location indications--in what type of library each reference had been located.

The data were keypunched and analyzed using the Statistical Package for the Social Sciences, Version X (SPSS-X). Coding permitted grouping by class, school, or sample as a whole. In addition, specific book, magazine, encyclopedia and newspaper titles used were coded using LisaList and manipulated for analysis purposes.

2. The student questionnaire focused on the facilities which the student had used for the particular assignment being analyzed. This approach, which is called the critical incident technique in survey research, is aimed at obtaining the most factually accurate data. The questions asked for specific information about what the students actually did. The questionnaire was based upon one which has been used successfully to collect this type of data in other studies. Among the topics covered by the first part of the questionnaire were:

- Facilities used in looking for materials. (A list was provided and students checked all appropriate entries.)
- Facilities from which materials were actually obtained (A repeat of the list mentioned above)
- Libraries in which the staff provided direct assistance to the student.
- Other sources of assistance. (parents, friends, etc.).

A second section of the questionnaire focused on the use of computers in completing the assignment being analyzed. This section was developed based on the assumption that students would be conducting their own searches after they received instruction. Due to problems in librarian

training and equipment delays this instructional model was altered and the actual online searches were, as mentioned above, designed by the students but carried out by a professional librarian in the school with the most experience. This section of the questionnaire was not included in the analysis.

A third and final section of the questionnaire provided space for students to report on any special ways they gathered information. Comments from this section were analyzed.

Questionnaires were coded and analyzed using Microsoft Multiplan, an electronic worksheet program. Coding permitted grouping by class, school, or sample as a whole.

Note. Cooperating teachers completed questionnaires providing background on the assignments and instruction offered to students in information searching and library use.

3. The records of student searches were attached to the bibliographies of those students who had requested online searches and submitted a search request form, including a declaration by the student of a simple search strategy to be followed. (See Appendix E for a copy of the search request form.)

Analysis included assessment of types of materials referenced online: number, type, and age of references from online searches used in student papers (i.e., referenced by the student in the attached bibliography); names and counts of databases used, including time online and cost.

Sample Selected and Units of Analysis

Classes in English, history, and science were part of the sample selected for this analysis. Students were in grades 10 through 12.

*Units of Analysis/Numbers of Responses

<u>Units of Analysis</u>	<u>Number of Responses</u>
Student papers	132
Student questionnaires	175
Teacher questionnaires	7
Student searches	111
Librarian interviews	3

*The difference in numbers of student papers, questionnaires and searches is due to the fact that not every student present in class at the time the data collection was done had a completed paper available. In addition, not all students whose bibliographies were analyzed had requested online searches on their topics.

DATA ANALYSIS: OBSERVATIONS AND IMPLICATIONS

Observation *1: The average student uses three information-providing facilities in meeting the demands of assignments requiring the use of materials other than classroom textbooks.

As Table 1 indicates, students in this study use both school and public libraries in searching for information for their assignments. Collections of materials found at home are also used by more than half (57%) of them. College and university libraries are important to a lesser extent (i.e., used by 27%). If students decide to use a particular type of facility, they are usually successful in finding something they reference in their papers. More than three-fourths of the students who used school, public and home collections found something they referenced from these locations.

The amount of help students claim they receive is an important consideration in developing service plans and instructional strategies to improve performance. The school library is the site of most assistance,

Table 1

Distribution of Student Use of Libraries by Percent Using Each Type, and Percent of Users Finding Information, Receiving Assistance from Library Staff, from Family or Friends, or from Surrogates

N - 175

Type of Library	% of Students Using	% of Students Using who Found Information	% of Students Using who Received Library Staff Help	% of Students Using who Received Help from Family/Friends	% of Students Using who Received Help of Surrogates
School	95 %	86 %	58 %	9 %	0 %
Public ¹	59	79	32	7	0
Community college	5	22	13	0	13
College or university	27	63	29	22	10
Home	57	75	0	3	0
Private ²	3	83	2	0	0
Other ³	17	63	0	0	0

¹ Includes both neighborhood and regional public libraries.

² Private libraries used by students include Wilmington Medical Library; Ashland Nature Center, Audubon Society; I.C.I. Americas; March of Dimes; and a college professor's private library.

³ Other sources used for gathering information include teachers, personal interviews, personal experience, book stores, and pamphlets received through the mail.

See Appendix H for a complete list of students' comments including types of facilities used.

with more than half (58%) of the students reporting they seek assistance there. About one-third of the students get help in public and college libraries; and, of course, no professional help is available at home. This is a particularly interesting finding in light of earlier studies of student use that measured the amount of help received. In studies of student use in which online access was not available, approximately one-third of the students reported receiving help in the school library, public library and college location. This substantial increase in assistance at the school is probably related to this new search technique.

IMPLICATION:

Formal cooperative arrangements among types of libraries in the state is logical since informal patterns of multiple library use have already developed. Union lists of holdings, particularly if they are accessible by subject, would enhance student use of collections. Universal borrowers' cards that would allow students to use any state-supported library would be the most sensible way to take advantage of this usage pattern, one that indicates a willingness to physically go to locations where materials considered of potential use are located. Formal cooperative programs should also include ways to train students to use locational tools with precision.

COMMENTS:

1. Multiple library facility use patterns exist. Students appear able and willing to use a number of different community facilities.
2. Students appear successful in finding information in the locations they try.
3. Since collections of materials found at home are used by more than half of the students, programs for parents should be jointly developed by schools and public libraries working in concert. Such programs could take a two-pronged focus: helping parents to upgrade materials held at home; and eventually training parents in how to use their home microcomputers to help their children locate information electronically.

Observation #2: Students appear to prefer books and magazines in selecting materials to meet the demands of their school assignments. The average student in this study referenced 8 items in his or her paper. The most heavily used types of materials were books (used by approximately four-fifths of the students) and magazines (used by three-fifths of them). The heaviest demand placed on libraries by these students is for books (45% of all references were to books and 82% of the students referenced at least one book). Magazine materials are next in importance (representing 23% of all references and used by 61% of the students). Newspapers and encyclopedias are used by about one third of the students. Government documents and pamphlets are rarely used, and nonprint is virtually unused. Table 2 describes student material usage patterns. (Additional analyses of materials usage patterns are presented in Appendix E.)

IMPLICATION: If library collections that serve students are structured to include materials other than books and magazines these materials must receive more emphasis in student instruction. The most successful way to do this is for librarians to work cooperatively with teachers in developing assignment specifications. Written assignment directions from teachers that require students to broaden their materials usage patterns is the most effective technique.

Comments:

1. Newspaper use that did occur was heavily influenced by data from one school that subscribed to News Bank, a service that supplies back issues of well-known newspapers on microfiche, and another school that held a subscription to the Current Events edition of The New York Times.
2. Use of encyclopedias should be considered by teachers and librarians. Only one-third of the students used encyclopedic sources, even though such sources may be excellent starting points for overviews of subjects being researched.
3. Nonprint collections that are intended to support student research should either be abandoned or brought more strongly to students'

Table 2
 Distribution of Types of References
 Used in Student Papers

Type of Reference	% of All References N - 1,133	% of Students Using N - 132
Books	45 %	82 %
Magazines	23	61
Newspapers	16	34
Other ¹	8	32
Encyclopedias	5	32
Government Documents and Pamphlets	2	8
Incomplete	1	7
Nonprint ²	<1	3
	----- 101 %	

¹ Other references include general reference materials, dictionaries and handbooks (e.g., *Annals of American History*, *Current Biography*, *Dictionary of American History*, and *Social Issues Resource Series*).

² Nonprint references are primarily interviews with one reference to a sound recording.

See Appendix I for a complete listing of the materials referenced by students.

attention. Nonprint was virtually unused by students in this study.

Observation #3: The school library has the heaviest load placed on it for the delivery of all types of documents to students.

Table 3, which indicates where particular references were actually found, can be read in two ways. By reading across the rows it is possible to see what percentage of a particular type of material was found in each type of facility. Reading down the columns shows where the heaviest use of a specific type of material is occurring. Almost half (44%) of the books referenced by students were located in school libraries. The next largest supplier of books (22% of the book references) was the public library. The school library is also clearly most important for magazine access. Approximately half (46%) of the magazine articles were located at school, with other library facilities contributing very few references. Newspaper access is almost completely (79% of all newspaper references) attributed to materials available in the school library. While half of encyclopedia use (46%) is at school, the 17% of encyclopedia references from the home are important to consider. These data support the contention that when students reference older encyclopedias they are, in most instances, using volumes found at home.

IMPLICATION: This data supports the belief that students find most of their materials in their school libraries. This does not mean that other libraries are unimportant to them. Public, home, academic and special collections are used to supplement what the school library holds. Formal cooperative arrangements should build upon and acknowledge this. Providing students with a universal borrower's card (as suggested earlier) that would allow them to use and be responsible to other libraries, is a logical step in improving their access to information. Considering current patterns of use, this would not mean that students become unusually heavy users of collections other than those in their schools.

Table 3
 Percent of References to Types of Materials
 Retrieved from Types of Institutions
 Total N = 1,133 References

Type of Library	Books N = 505	Magazines N = 256	Newspapers N = 186	Other N = 89	Encyclopedias N = 59	Pamphlets N = 18	Incomplete N = 15	Nonprint N = 5
School	44 %	46 %	79 %	71 %	46 %	11 %	7 %	0 %
Public ¹	22	9	2	0	2	11	0	0
Community College	<1	0	0	0	0	0	0	0
College/University	7	11	1	1	0	0	13	0
Home	5	9	1	4	17	6	0	0
Private	<1	<1	0	0	0	0	0	0
Other	6	4	1	7	3	33	0	40
Student didn't specify	14	20	17	17	32	39	80	60
	100 %	100 %	101 %	100 %	100 %	100 %	100 %	100 %

COMMENT:

1. Current patterns indicate that where public libraries are used by students for assignments, it is to borrow books. Cooperative collection development agreements between area school and public libraries could enhance the diversity of what is available.

Observation #4: Students are not sufficiently aware of the age of the materials they use. As Table 4 indicates, only 15% of the books referenced had been published within the last five years. Most references (65%) to books were to titles published before 1974.

IMPLICATION: Training programs for students should emphasize the importance of assessing the currency of information sources. In addition, library collections should be vigorously weeded to remove outdated information. This is of particular financial concern when the idea of entering titles statewide into an access network is being considered. It is wasteful to spend time and money on entering large portions of materials into an electronic network if they are no longer relevant to users.

COMMENTS:

1. This does not mean that materials of an archival or timeless nature can or should be automatically discarded. It does mean that collections specifically geared to school students should be weeded in order to remove and discard obsolete materials as well as identify older holdings that might be of more utility in other publicly-supported collections.

Table 4
 The Distribution of Age of Books
 Referenced by Students
 N - 505 references

Date of Books	% of All Books	Cumulative % of Books
1984	<1 %	<1 %
1983	5	6
1982	3	9
1981	4	13
1980	2	15
1979	4	19
1978	4	23
1977	4	27
1976	4	31
1975	4	35
1974 - 1970	23	58
1969 - 1965	16	74
1964 - 1960	10	84
1959 - 1955	7	91
1954 - 1950	3	94
Before 1950	6	100
No date provided	2	102
	102 %	102 %

Observations #5 and #6 cannot be separated in terms of implications and comments; therefore, they are considered together below.

Observation #5: Magazine use is relatively current and appropriate to the topics being studied by students. As Table 5 shows, approximately three-fifths of all magazine references were to articles within the past five years. When the measure of currency is extended to ten years, almost three-fifths of all magazine references are within this time period. There is, however, sensible use of older articles by students studying historical events.

Observation #6: Magazine usage is focused in a core of popular titles, used over a broad time span. Table 6 indicates how the 256 references to magazines were dispersed across 81 unique titles.

IMPLICATION: Core titles (the top contributors) should be part of every collection serving students and should be held as far back as possible in order to meet the greatest potential use. Peripheral titles (i.e., those not in the core) should be selected for greatest possible area diversity, rather than considerations of the diversity of any single collection.

Comments:

1. Seventeen of the top twenty titles have been identified in earlier studies as core titles. (The three new entries from this list are Grand National Scene, which a student located at home; Editorial Research Reports and Good Housekeeping. The appearance of these three titles in this list of highly used magazines is probably a fluke and these titles should not be considered candidates for core lists.)
2. Union lists of serials should include titles held by schools. School collections examined in this study held some titles unique to individual schools. Such information on title holdings would be useful in a statewide holding list. (See Appendix F for complete lists of magazine holdings in the three sample schools.)

Table 5
 The Distribution of Age of Magazines
 Referenced by Students
 N = 256 references

Date of Magazines	% of All Magazines	Cumulative % of Magazines
1984	5 %	5 %
1983	21	26
1982	17	43
1981	10	54
1980	7	60
1979	5	65
1978	2	68
1977	4	71
1976	<1	72
1975	<1	73
1974 - 1970	5	78
1969 - 1965	4	82
1964 - 1960	3	85
1959 - 1955	2	87
1954 - 1950	12	99
Before 1950	<1	100
No date provided	1	101
	----- 101 %	----- 101 %

Table 6
The Dispersion of Magazine Articles Referenced by Students

N = 256 references

Magazine Rank		N of References to Magazine	Cumulative References to Magazine	Cumulative % of All References	Oldest Use
1	Time	36	36	14 %	1951
2	Newsweek	32	68	27	1951
3	Science	18	86	34	1977
4	U.S. News & World Report	12	98	38	1952
5	Science News	11	109	43	1981
6	Psychology Today	8	117	46	1974
7	Science Digest	7	124	48	1980
8	American Heritage	6	130	51	1967
9	National Review	6	136	53	1979
10	Reader's Digest	6	142	55	1979
11	New Republic	5	147	57	1972
12	New York Times Magazine	5	152	59	1975
13	People	5	157	61	1979
14	Seventeen	5	162	63	1982
15	Grand National Scene	4	166	65	1983
16	McCall's	4	170	66	1973
17	Editorial Research Reports	3	173	68	1979
18	Good Housekeeping	3	176	69	1980
19	National Geographic	3	179	70	1968
20	Scientific American	3	182	71	1966
21 thru 33		27 (2x13)	208	81	
34 thru 81		32 (1x48)	256	100	
		<hr/> 302	<hr/> 302	<hr/> 100 %	

3. Students should have access to serial holdings information if they are to locate essential materials. This is particularly important if they are to use electronic bibliographic databases which include many references to magazines and journals that are not held by their schools.
4. Appendix F contains information in tabular and chart format relating to the magazine holdings of the three sample schools. It would be possible to build similar tabular displays for all libraries within a geographic area. This would provide libraries in an area with a tool to allow them to consider trading incomplete sets in order to build unbroken sets of titles, with holdings information for various locations.

Observation #7: Few of the references that came up online were used by students in their bibliographies. This may be due to the fact that materials retrieved online are either too sophisticated for the student to consider or they are impossible to locate.

Table 7
Inclusion of References from Online Searches
In Students' Bibliographies

N = 132 students

N of References Identified in Online Search Used In Students Papers	% of Students Using	Cumulative % of Students Using
0	84 %	84 %
1	10	94
2	3	97
3	2	99
4	1	100
5	1	101
	<hr style="width: 50px; margin: 0 auto;"/> 101 %	<hr style="width: 50px; margin: 0 auto;"/> 101 %

27

IMPLICATION: It is essential to monitor the impact of computerized access to bibliographic data if schools incorporate online bibliographic database searching into training programs for students. These data indicate that very few references that come up online are actually used to meet the demands of student assignments.

COMMENTS:

1. Most of the online citations used by students were referenced by students in one school. This was the school that did all of the searching. This school also indicated on their students' search records which materials were available in the school library. This type of strategy may be needed if librarians want students to consider the materials that come up online.

Observation #8: Online references that were used by students were to current materials. As Table 8 indicates, three-fourths of the references were within the past five years; and all online references used were within the past ten.

IMPLICATION: Statewide identification of current holdings, accompanied by arrangements to allow students access to libraries beyond those in their schools, will probably increase student use of current materials.

Comment:

1. Local task forces of librarians should share experiences and strategies for collection development in order to enhance area subject diversity.

Observation #9: The database selected most often by the professional librarian in performing searches for students was a database that covers popular magazine articles (Magazine Index). Two-thirds of all searches were performed using this database.

Table 8
The Distribution of Age of Computer-Generated Materials
Referenced by Students

N = 36 references¹

Date of Materials	% of Materials	Cumulative % of Materials
1984	3 %	3 %
1983	39	42
1982	14	56
1981	14	70
1980	3	73
1979	8	81
1978	3	84
1977	6	90
1976	3	93
1975	0	0
1974	8	101
	----- 101 %	----- 101 %

¹ Most of these materials (86%) were referenced by students in one school.

Table 9
 Databases Accessed for Students
 N = 193 searches

File Number	Database	% of Searches in this Database
38	America: History & Life	11 %
5	Biosis Previews	5
163	Career Placement Reg/Student	1
1	ERIC	1
40	Enviroline	3
39	Historical Abstracts	4
71	MLA Bibliography	1
47	Magazine Index	66
41	Pollution Abstracts	3
11	Psycinfo	1
37	Sociological Abstracts	5
93	U.S. Political Sci Documents	1
167	World Affairs Report	1
		102 %

IMPLICATION: At this point in time it is unclear which databases are suitable for the needs of students. In order to focus electronic access strategies in the most cost effective and efficient manner (i.e., select database sources that may have pertinent references for non-adult searchers) it is essential to keep and analyze records of use.

COMMENTS:

1. The recent announcement by H.W. Wilson (November 1, 1984) that Readers' Guide to Periodical Literature is available online should be considered in selecting databases for student access.
2. A log sheet, similar to the one included as Appendix G, should be kept by all school libraries engaging in local online searching.

Observation #10: The average cost of searching using a professional searcher was \$1.31. In a similar study in which students performed their own online searches, the average cost of a search was \$2.56.

IMPLICATION: Although it may cost less to have professional librarians conduct searches for students, this may not be the best educational model to select. The latest developments in end-user searching have demonstrated that accessing bibliographic databases using home computers is possible and probable. If the educational goal for students is to prepare them to become competent and efficient users of computers for bibliographic searching, they will need extended instruction and practice in actually performing searches online in their schools.

Comment:

1. It is essential to develop clear educational objectives for introducing electronic bibliographic database access in schools. A list of possible objectives for consideration of teachers and librarians follows.

Table 10
 Cost Statistics Related to Online Searching
 N = 111 searches¹

File Number	Database	Total Cost per File for Students' Searches	Average Cost per Search ²	Maximum Cost	Minimum Cost	Median Cost
38	America: History & Life	\$ 8.76	\$ 1.09	\$ 1.86	\$.81	\$ 1.20
5	Biosis Previews	4.35				
163	Career Placement Reg/Student	3.02				
1	ERIC	2.35	1.18	1.43	.92	
40	Enviroline	7.74	1.55	3.62	.78	.92
47	Magazine Index	112.23	1.26	3.02	.81	1.79
11	Psycinfo	3.19	1.60	2.06	1.13	
93	U.S. Political Sci Documents	3.44	1.72	2.29	1.15	
167	World Affairs Report	1.26				
		\$ 146.34				

** AVERAGE COST PER SEARCH OVERALL \$ 1.31³

- 1 Cost statistics were not available for all searches.
- 2 In some instances, searcher remained connected to the same online file to perform more than one search. This strategy reduces individual search cost.
- 3 In a similar study in which students performed their own online searches, the average cost of a search was \$2.56.

CLARIFYING EDUCATIONAL OBJECTIVES FOR PUTTING STUDENTS ONLINE

In an age in which information is considered a key ingredient in solving problems and making decisions, it is incumbent upon schools and other publicly-supported information-providing organizations to help students develop competency in locating, retrieving and assessing information to meet both current and future needs. The latest technological development in terms of retrieving bibliographic information is computerized bibliographic database searching, the type of retrieval students in this project were introduced to.

Adding instruction in this aspect of how to search for, assess, and retrieve information to existing training programs designed for students raises a number of issues. One issue that this investigation raised and that must be clarified is whether students should be taught to do their own searching, or whether the student should only receive instruction in the search process, with the expectation that a professional searcher will perform the actual search.

In order to consider the above question it is essential to clarify the reasons for introducing this innovative procedure to students. Educational goals and objectives for putting students online should be clearly articulated in the first place. Potential goals and objectives for such programs are listed below.

Goal #1: TO GENERATE NEW OPPORTUNITIES FOR INSTRUCTION

Objectives:

As a result of instruction, students should :

- a) understand relevant online terminology, including but not limited to Boolean operators, access points and limiting functions;

- b) have a rudimentary knowledge of the thesauri and indexes which are used as a preliminary step to the formulation of a search strategy;
- c) be able to posit a tentative search strategy in terms of Boolean logic upon directed topics in preparation for actual online searching;
- d) be able to narrow or broaden a topic as necessary;
- e) be able to interpret a bibliographic record and evaluate the results received;
- f) observe the execution of their search strategy on a selected database;
- g) conduct and modify a search on selected databases while online;
- h) utilize some of the citations retrieved as research for their assignments; and
- i) be aware of the advantages and disadvantages of online searching.

GOAL #2: TO GENERATE ENTHUSIASM FOR THE RESEARCH PROCESS

GOAL #3: TO EXPAND THE STUDENT'S CONCEPTION OF THE VARIETY OF INFORMATION AVAILABLE

Objectives:

Students should, as a result of instruction:

- a) be acquainted with a variety of available databases and possess an understanding of the selection process and

- b) develop an expanded sense of the universe of available documents on any given subject.

GOAL #4: TO EXTEND THE STUDENT'S KNOWLEDGE OF THE DIVERSITY OF INFORMATION-PROVIDING FACILITIES AVAILABLE

Objective:

Students should, as a result of instruction:

- a) know how to use all publicly-supported libraries to locate materials.

Training models for students should be developed cooperatively by librarians working with teachers. Programs should be based on an analysis of what is necessary to achieve successful completion of jointly agreed upon goals and objectives. Continued examination of what students actually do as a result of training will provide librarians and teachers with an understanding of how instructional strategies can be modified to improve student performance.

SUMMARY AND RECOMMENDATIONS

This investigation addressed how a purposefully selected sample of high school students in Delaware use library facilities and materials in meeting the demands of their school assignments. In particular, this report looked at the impact of the introduction of electronic bibliographic access on student information seeking behaviors.

The impetus for conducting this study came from a small number of individuals currently part of committees and task forces that are looking at statewide efforts to design library systems that will improve access to information for all citizens of Delaware. Such systems must take into consideration demonstrated patterns of library use by groups such as the one in this study. In order to enhance use through cooperation it is essential to know what users are currently doing and how technological developments may be affecting use of specific facilities and materials.

The following observations, taken from the body of the report, are presented in summary fashion below. (Readers are urged to consider the section on Data Analysis: Observations and Implications for a fuller understanding of this summary.)

- A Multiple library use facility patterns exist. The average student uses three information-providing facilities in meeting the demands of assignments requiring the use of materials other than classroom texts. The most important facilities are collections of materials located in school and public libraries and at home, with college and university libraries playing a lesser role.

Recommendations:

1. Including schools and school students in formal cooperative arrangements among types of libraries is logical since informal patterns of multiple library use have already developed.
2. Developing statewide union lists of holdings, particularly serials holdings, will enhance student use of all collections.

3. Developing universal borrowers' cards that would allow students to use any state supported library is the most sensible way to take advantage of the usage pattern that exists.
 4. Formal programs of cooperation should include training activities that will help students use newly developed location tools with accuracy.
- B. Students indicate they seek help in libraries, particularly in their school library. More students in this study indicate seeking help in their school libraries than in earlier studies of student use. This may be due to the introduction of electronic access possibilities in searching for information.

Recommendation:

1. The presence of professional help in libraries is as important as the collections available. Students indicate that they can and do seek assistance. This must be kept in mind in considering staffing patterns, particularly in school libraries that are interested in providing access to information electronically.
- C. Format preferences for types of materials exist. Books and magazines are the most heavily referenced types of materials.

Recommendations:

1. If library collections that are specifically geared to students include materials other than books and magazines, these materials must receive more emphasis in student instruction.
2. The most successful way for librarians to influence the variety of materials that students use is to work cooperatively with teachers in developing assignment specifications. (See Observation #2 for discussion of specific types of materials usage patterns.)

- D Analysis of where individual references were found indicates that the school library supplies most of the materials students use, although other collections are essential in meeting the very broad topic interests of students, such as those in this study.

Recommendation:

1. Providing students with a universal borrower's card (as suggested above) would not mean that libraries other than those located in schools would receive heavy use by students. This innovative approach would, however, be a logical way to broaden the student's idea of what is available and make them aware of how all libraries are organized to meet the needs of users.

- E Students are not sufficiently conscious of the age of the materials they use. It is not unusual for them to reference items that appear to be dated.

Recommendations:

1. Training programs for students should emphasize the importance of assessing the currency of the items they select.
2. Librarians should be more sensitive to the ages of their collections, and efforts should be made to weed obsolete materials. Weeding activities should be seriously considered since extensive retrospective conversion of collections for access electronically is under consideration.

- F A core group of magazine titles can be identified and suggested for libraries that serve students.

Recommendations:

1. The core should be held (and held across a board time span) by all libraries serving students.

2. In order to maximize use, magazines subscription practices should be discussed by area librarians, with emphasis placed on developing area diversity rather than diversity of any single collection.
- G At this point in time very few of the references that are retrieved in an online search are actually referenced by students in their papers. Many of the items that came up online were too sophisticated to be useful; not present in school library collections; and difficult to locate in other library facilities.

Recommendations:

1. Use of online references could be improved if students knew where to locate the materials (particularly magazine and journal articles) that are referenced. Statewide lists that provide this type of information would be useful.
- H The electronic database of greatest use to students at this time is one that covers popular magazines.

Recommendation:

1. Librarians must be cognizant of the sophistication of the databases suggested to or used for students. In order to build a broad base of experience that other professionals can share, records of use must be maintained and analyzed. One approach is to keep a formal log of online use such as the one suggested in Appendix G of this report.
- I The average cost of searching when a professional librarian performs the student's search is about half of the cost found in other studies where students did their own searching. This type of retrieval does not, however, provide the student with any actual online experience to translate to other situations or to use in the future.

Recommendation:

1. Educational objectives for putting students online must be clarified and used as guides by teachers and librarians working in concert to build student information seeking skills programs.

The purpose of this report is to assist concerned citizens in Delaware who are responsible for developing information services and programs for students in making decisions about cooperative activities. Decisions should take into consideration current information seeking behaviors. It is hoped that programs developed as a result will prepare students to become more expert at locating, retrieving, assessing and summarizing information. This will mean that educators at the post secondary level will have better prepared students; and that employers in the state will eventually have employees who are more efficient in using available information resources.

APPENDIX A: INSTRUCTIONS FOR COOPERATING LIBRARIANS

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Instructions for Cooperating Librarians

1. Prepare 3 x 5 cards with the names of the students who will be participating in this study.
2. Collect the students' papers from the teachers and photocopy the bibliographies only. Do not put the students' names on the photocopies.
3. Paperclip the bibliography and that student's online search printouts, if any, to the 3 x 5 card. Attach a copy of the student questionnaire. These packets of materials -- one packet for each student -- will be used in your classroom data collection.
4. Schedule a time to explain the study to the class.
5. Take with you to that session:
 1. The packet of materials for each student. Each packet should include:
 - a 3 x 5 card with the student's name
 - a copy of the student questionnaire
 - the student's bibliography
 - the printouts from the student's online search, if a search was performed
 2. A copy of the teacher questionnaire.
 3. A tape recorder to record your comments to the class.
 4. A large, padded brown envelope addressed to Jacqueline Mancall. [See address at end of instructions.
6. Distribute the packets to the students. Give the teacher the questionnaire he/she is to fill out.
7. Explain what the study is about and why we are doing it. It is important to create a positive atmosphere in which the students will feel comfortable responding to the questionnaire. Below are some suggestions for your explanation:

We are interested in learning about the types of resources students use when writing papers for class assignments and where students find these materials. In particular, we are trying to discover whether there is a difference in the types and locations of resources used if the students have an online search service available to them. We don't know the answer to this question; that's why we're asking you to help us in this study. I will be sending the questionnaires, copies of the bibliographies from your papers, and the printouts from your computer searches to Dr. Jacqueline Mancall at Drexel University in Philadelphia. She will study these data and tell us what she has learned about your patterns of use. We will use her analysis to help us improve our collection and services to you. Before I collect the materials from you, you will be removing the index card with your name. No one will know whose questionnaires, bibliographies and online searches these are.

8. Have the students and the teacher fill out the questionnaires.
9. Have the students identify where they found the material for each reference on their bibliographies. Write the following code on the blackboard:

- A - School Library
- B - Neighborhood Public Library
- C - Large regional public library (Wilmington Institute Library)
- D - Community college library
- E - College or university library
- F - Home or personal library
- G - Private libraries
- H - Other. Please write in type or name of library

Tell students to write the appropriate location code next to each reference in their bibliographies.

10. Have each student remove the 3 x 5 card and STAPLE the questionnaire, bibliography and online search printout together. This is very important, we will produce a better analysis if we can tie a questionnaire, a bibliography and an online search together.
11. Collect the packets and place them, along with the cassette on which you have recorded this session, into the brown envelope and seal it in front of the students. Mail the envelope to:

Dr. Jacqueline C. Mancall
College of Information Studies
Drexel University
Philadelphia, PA 19104

Thank you!

**APPENDIX B: REQUEST FOR ONLINE SEARCH FORM USED BY
STUDENTS**

REQUEST FOR ONLINE SEARCH

Name _____

Today's Date _____ Date Needed _____

Subject _____ Teacher _____ Grade _____

Topic _____

Description of topic _____

Key words to be used in search (include synonyms, closely-related phrases; scientific and technical terms, also) _____

Time restrictions (if applicable) _____

Information needed

_____ Bibliographic citation

_____ Abstract (if available)

Library Use Only

SEARCH STRATEGY

Data Bases _____

Concepts
A B C

Index _____ Additional Index _____ Limit _____

of Citations _____ Printout format 1 2 3 4 5 6 7

Cost _____

APPENDIX C: GENERAL TOPICS OF STUDENTS' PAPERS

Topic
1920's
acid rain
adolescent sexuality
adopting children with special needs
Afro-Americans
Albert Camus
alcoholism
alcoholism
alcoholism
American immigration
American immigration
American Indians
American Indians
American intervention in Chile
American quarter horses
Andrew "Stonewall" Jackson
anorexia nervosa
Anorexia Nervosa and its Link with Social Pressures
cancer
capital punishment
Charles Lindbergh
child abuse
child abuse
child molesting
civil rights
Civil War
Cocaine: A History of Use and Abuse
Cold War
colonial period of American history
communism in the United States
cosmetology
criminal justice
Cuban missile crisis
decision making
demonic possession
diabetes
Dioxin and the Environment
discrimination on the job
divorce
dreams
dreams and nightmares
drugs
drugs
drugs and alcohol

Topic

Dwight Eisenhower
effects of drugs and alcohol on unborn babies
energy crisis
Equal Rights Amendment
European and American fashions
Franklin D. Roosevelt
Franklin D. Roosevelt
Genetic Counseling: The Choices
Gibberellin, a Plant Growth Regulator
Great Depression
Great Depression
Great Depression
Great Depression
Harry S. Truman
Harry S. Truman
hazards of cigarette smoking
health foods
Henry Kissinger
Herpes
historic landmarks of Delaware
history of the South
Holocaust
human heart
hypnosis
In Search of Magic Bullets: Monoclonal Antibodies and Cancer
information society
Jackie Robinson
Japanese auto industry
Joe McCarthy
John Wayne
Kent State incident
kidnapping of Charles Lindbergh's son
Language of Wolves
Lyndon Johnson
Malcolm X
Manet
marijuana
Mussolini
Napoleon Bonaparte
nuclear energy
organized crime
organized crime
organized crime
origins of World War II

Topic

parapsychology
 Populist party
 prison life
 Prohibition
 Prohibition
 racial conflicts -- 1960's
 racial conflicts in the South
 radiation and cancer
 rape
 rape
 reconstruction after the Civil War
 rock music
 rock musicians who have died of drug overdoses
 role of women in society
 role of women in society
 runaways
 socialism in the United States
 space travel
 Special Olympics
 spies in World War II
 sports on television
 stock car racing
 stress
 student activism
 student activism
 suicide
 surrogate mothers
 Susan B. Anthony
 Symbiosis in a Coral Reef and its Destruction and Preservation
 The Advantages of Cloning in Agriculture
 The Destructive Force of the Chemical Ethanol
 Third Reich
 Ulysses S. Grant
 Un Personage Remarquable: The Brown Pelican
 Vietnam
 volcanoes
 Wendell Wilkie
 William Shakespeare
 witchcraft
 witchcraft
 World War II
 World War II

APPENDIX D: STUDENT QUESTIONNAIRE

STUDENT QUESTIONNAIRE

PART ONE: USING LIBRARIES

1. Did you use any of these libraries in preparing your research papers, even if you didn't find any information? Check as many boxes as apply.

- School library
- Neighborhood public library
- Large regional public library (Wilmington Institute Library)
- Community college library
- College or university library
- Home or personal library
- Private libraries, i.e., those belonging to companies, research organizations, or special groups. Please specify.

Other, please specify.

2. Here's the list of libraries again. This time check only those in which you got information you used in your paper.

- School library
- Neighborhood public library
- Large regional public library (Wilmington Institute Library)
- Community college library
- College or university library
- Home or personal library
- Private libraries, i.e., those belonging to companies, research organizations, or special groups. Please specify.

Other, please specify.

3. Did the staff of any of the above libraries help you find information?

Yes No

If yes, please specify in which types of libraries you received help.

4. Did anyone else, such as a friend or family member, help you use a library by accompanying you and assisting you there?

Yes No

If yes, please specify in which types of libraries you received this help.

5. Many times friends and family are able to gather information from libraries for students. Did someone use any library for you? (In other words, use it for you without you being present.)

Yes

No

If yes, please specify in which types of libraries were used by someone else for you.

PART TWO: USING COMPUTERS

6. Did any of your friends or classmates use a computer in their search for this assignment?

Yes

No

Don't know

7. Did you use a computer in your search for this assignment?

Yes

No

If you answered "no" to this question, skip to Question 15.
If you answered "yes," please go on to Question 8.

8. Did you search printed copies of an indexing tool or the card catalog before you did your computer search?

Yes

No

9. Please check the box next to the statement below that comes closest to describing your impression of how your computer search overlapped your manual search of printed indexes.

I found all of the same items plus others

I found all of the same items but no additional ones

I found many of the same items

I found a few of the same items

I found none of the same items

Other, please specify _____

Had you already located any of these same items before the computer search?

Yes

No

I didn't find any of the same items in the computer search.

10. Of the references retrieved online in your computer search, how many did you try to locate?
Check as many boxes as apply.

- Those I thought might be available in the school library
- Those I thought might be available in the public library
- Those I thought might be available in a college library
- All of them
- None of them
- Other, please specify. _____

11. If you located any of the references retrieved online, did any of them provide information that helped you write your paper?

Yes No

If yes, please tell us how: _____

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12. Check all the places in which you performed a computer search to gather information for this assignment.

- School library
- Neighborhood public library
- Large regional public library (Wilmington Institute Library)
- Community college library
- College or university library
- Home or personal library
- Private libraries, i.e., those belonging to companies, research organizations, or special groups. Please specify.

Other, please specify.

13. Check any of the boxes below that indicate how and when you scheduled your computer search for this assignment.

- Searched during a regular class period
- Searched during free time (for example, study hall, etc.)
- Made arrangements to search with school librarian
- Made arrangements to search at a public library
- Made arrangements to search at a college library.
- Searched at home
- Searched at a friend's house.
- Other, please specify.

14. Please check all the people who assisted you with your computer search (by helping you with either writing the strategy or doing the search online)

- Classroom teacher
- School librarian
- Public librarian
- College librarian
- Friend
- Relative
- Other, please specify.

PART THREE: OTHER WAYS OF GATHERING INFORMATION

15. Please comment on any other ways you gathered information. For example, did you interview people or write for information? List what you think was useful to you.

APPENDIX E: ADDITIONAL TABLES DESCRIBING STUDENT USE OF
MATERIALS

Table 11
The Distribution of Age of Newspapers
Referenced by Students

N = 186 references

Date of Newspapers	% of All Newspapers	Cumulative % of Newspapers
1984	11 %	11 %
1983	8	19
1982	8	27
1981	4	31
1980	3	34
1979	2	36
1978	0	36
1977	1	37
1976	1	38
1975	2	40
1974 - 1970	2	42
1969 - 1965	11	53
1964 - 1960	0	53
1959 - 1955	0	53
1954 - 1950	0	53
Before 1950	47	100
No date provided	2	102
	----- 102 %	----- 102 %

Table 12
 The Distribution of Age of Encyclopedias
 Referenced by Students

N = 59 references

Date of Encyclopedias	% of All Encyclopedias	Cumulative % of Encyclopedias
1984	2 %	2 %
1983	5	7
1982	0	7
1981	3	10
1980	3	13
1979	5	18
1978	10	28
1977	7	35
1976	10	45
1975	3	48
1974 - 1970	20	68
1969 - 1965	5	73
1964 - 1960	7	80
1959 - 1955	5	85
1954 - 1950	10	95
Before 1950	0	97
No date provided	3	98
	98 %	98 %

Table 13
 The Distribution of Age of Other
 Referenced by Students
 N = 89 references

Date of Other	% of All Other	Cumulative % of Other
1984	1 %	1 %
1983	1	2
1982	3	5
1981	0	5
1980	0	5
1979	1	6
1978	1	7
1977	0	7
1976	15	22
1975	3	25
1974 - 1970	7	32
1969 - 1965	26	58
1964 - 1960	3	61
1959 - 1955	0	61
1954 - 1950	1	62
Before 1950	4	66
No date provided	33	99
	----- 99 %	----- 99 %

**APPENDIX F: ADDITIONAL FIGURES AND TABLES ILLUSTRATING
MAGAZINE HOLDINGS IN SAMPLE SCHOOLS**

Figure 1
Number of Top-20 Magazines Titles
Held by Each School

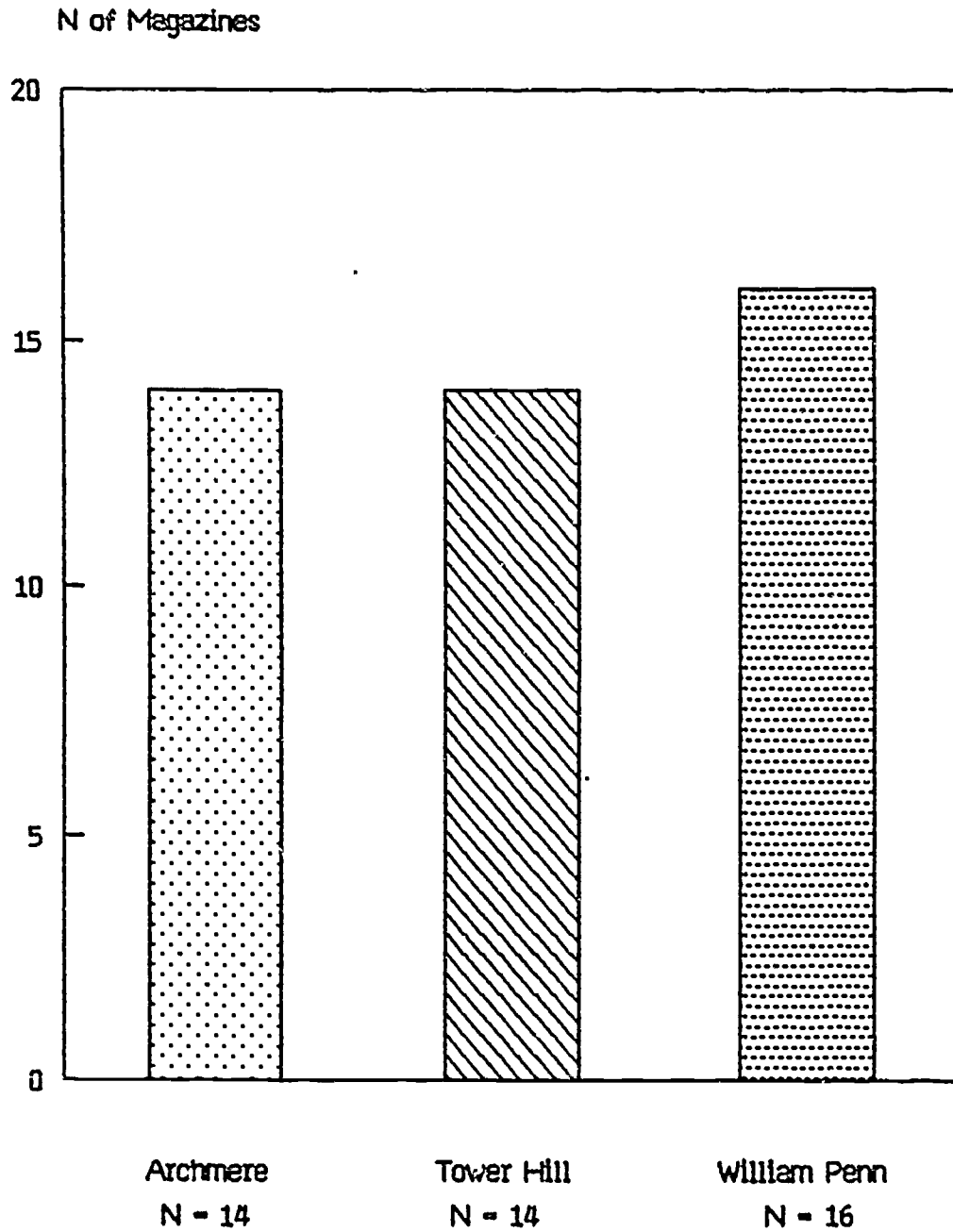


Table 14
Retrospective Holdings of the Top-20 Magazine Titles
By School

Magazine Rank	Oldest Issue Held by Each School			Oldest Use By Students	
	Archmere	Tower Hill	William Penn		
1	Time	1960	1950	1979	1951
2	Newsweek	1961	1951	1979	1951
3	Science	1979	1981	----	1977
4	U.S. News & World Report	1960	1952	1979	1952
5	Science News	1979	1968	1979	1981
6	Psychology Today	1969	1983	1979	1974
7	Science Digest	1979	---	1979	1980
8	American Heritage	1954	1950	1979	1967
9	National Review	1974	1967	1979	1979
10	Reader's Digest	1970	---	1979	1979
11	New Republic	---	1968	1979	1972
12	New York Times Magazine	---	1973	1979	1975
13	People	1980	---	1979	1979
14	Seventeen	1984	1981	1979	1982
15	Grand National Scene	---	---	1979	1983
16	McCall's	---	---	1979	1973
17	Editorial Research Reports	---	1983	---	1979
18	Good Housekeeping	---	---	1979	1980
19	National Geographic	1959	1913	1979	1968
20	Scientific American	1979	1950	1979	1966

Magazine Holdings of the Sample Schools

Magazine Title	School	Holdings: Bound/Unbound	Holdings: Microfilm
80 Microcomputing	TH	1983-1984	
Amateur Wrestling	A	1983-1984	
Amer. Acad. Pol/SocSci Annual	TH		1968-1978
America	TH	1981-1984	1968-1982
America	A	1970-1984	
American Craft	TH	1981-1984	
American Craft	A		
American Education	EP	1979-1984	
American Heritage	EP	1979-1984	
American Heritage	TH	1950-1984	
American Heritage	A	1954-1984	
American Historical Review	TH	1966-1984	1969-1972
American History Illustrated	EP	1979-1984	
American History Illustrated	TH		
American Libraries	TH	1981-1984	
American Literature	TH		1968-1972
American Quarterly	TH		1968-1982
American Scholar	TH	1969-1978	
Americana	TH	1981-1984	
Americas	A		
Art in America	A	1979-1984	
Art News	TH	1983-1984	
Artforum	TH	1981-1984	
Asimov's Science Fiction	TH	1983-1984	
Athletic Journal	TH	1981-1984	
Atlantic Monthly	EP	1979-1984	
Atlantic Monthly	TH	1981-1984	1968-1982
Atlantic Monthly	A	1960-1984	
Attenzione	A	1982-1984	
Best Sellers	A	1981-1984	
Better Homes and Gardens	EP	1979-1984	
Better Homes and Gardens	A	1983-1984	
Biology Digest	TH	1983-1984	
Book Report	TH		
Booklist	EP	1979-1984	
Booklist	TH	1981	
Booklist	A	1981-1984	
British Heritage	TH	1984	
Bull./Center for Child. Exs.	TH		
Bulletin of Atomic Scientists	TH	1983-1984	
Bunte	A		
Business Week	EP	1979-1984	
Business Week	A	1979-1984	
Byte	EP	1979-1984	

Magazine Title	School	Holdings: Bound/Unbound	Holdings: Microfilm
Byte	TH		
Byte	A	1980-1984	
Campus Life	WP	1979-1984	
Car and Driver	WP	1979-1984	
Career World	WP	1979-1984	
Center Magazine	TR	1969-1984	
Center Report	TH	1971-1976	
Change	TH	1970-1978	
Changing Times	WP	1979-1984	
Changing Times	TH	1981-1984	
Changing Times	A	1979-1984	
Christian Century	TH		1968-1982
Classical Calliope	TH	1983-1984	
Classroom Computer Learning	TH		
Classroom Computer News	WP	1979-1984	
Co-Ed	WP	1979-1984	
Coaching Clinic	TH	1981-1984	
Commentary	TH		1968-1982
Common Cause	TH		
Commonweal	TH		1968-1982
Computers & Electronics	A		
Computerworld	WP	1979-1984	
Computing Teacher	TH		
Congressional Digest	WP	1979-1984	
Congressional Digest	A	1978-1984	
Congressional Quarterly	TH		
Consumer Reports	WP	1979-1984	
Consumer Reports	A	1979-1984	
Consumer Research	A	1979-1984	
Context (Du Pont)	TH	1981-1984	
Creative Computing	TH	1983-1984	
Creative Computing	A	1978-1984	
Cultural Information Service	A		
Current History	WP	1979-1984	
Current History	TH	1951-1964; 1969-1984	1965-1982
Current History	A	1978-1984	
Daedalus	TH	1976-1982	
Delaware Conservationist	TH	1981-1984	
Delaware Today	A	1974-1984	
Democracy	TH	1983-1984	
Department of State Bulletin	TH		1968-1982
Digit	TH		
Discover	WP	1979-1984	
Discover	TH	1983-1984	

Magazine Title	School	Holdings: Bound/Unbound	Holdings: Microfilm
Discover	A	1960-1984	
Dr. Dobbs' Journal of Computers	TH	1981-1984	
DuPont Magazine	TH	1981-1984	
DuPont Today	TH	1981-1984	
Early American Life	TH	1979-1984	
Early American Life	A	1973-1984	
Ebony	EP	1979-1984	
Ebony	TH	1983	
Education Digest	EP	1979-1984	
Educational & Industrial TV	TH	1981-1984	
Electronic Education	TH		
Electronic Learning	TH		
Emergency Librarian	TH	1983-1984	
Enquiry	TH	1983-1984	
Environment	EP	1979-1984	
Epoca	A		
Essence	EP	1979-1984	
Europe	TH	1981-1984	
Exceptional Children	TH	1981-1984	
Farm Journal	EP	1979-1984	
Field and Stream	EP	1979-1984	
Field and Stream	TH	1981-1984	
Field and Stream	A	1982	
Foreign Affairs	TH	1955-1982	1968-1982
Foreign Affairs	A	1972-1984	
Futurist	TH	1981-1984	
GEO	TH		
GEO MUNDO	TH		
Gifted/Creative/Talented Chldrn	EP	1979-1984	
Glamour	EP	1979-1984	
Glamour	A	1984	
Good Housekeeping	EP	1979-1984	
Harper's	EP	1979-1984	
Harper's	TH	1981-1984	1968-1982
Harper's	A	1968-1984	
Harper's Bazaar	EP	1979-1984	
High Fidelity/Musical America	EP	1979-1984	
History Today	TH		1968-1982
Hola	A		
Horizon	EP	1979-1984	
Horizon	TH	1958-1984	
Horizon	A	1977-1984	
Hot Rod	EP	1979-1984	
Hot Rod	A	1984	

Magazine Title	School	Holdings: Bound/Unbound	Holdings: Microfilm
House and Garden	WP	1979-1984	
Ideals	WP	1979-1984	
In These Times	TH		
Info World	TH	1983-1984	
Information Tech. and Libraries	TH		
Instructional Innovator	TH	1981-1984	
Japan Report	TH	1981-1984	
Jet	WP	1979-1984	
Journal of American History	TH	1971-1984	
Journal of Higher Education	TH		
Journal of Modern History	TH	1966-1982	1968-1982
Journal of Negro History	TH	1971-1976	1968-1974
Journal of Reading	TH	1974-1984	
Journal of Southern History	TH	1971-1975	
L'Express	A	1984	
Ladies Home Journal	WP	1979-1984	
Learning and Media	TH		
Library Journal	A	1982-1984	
Library Trends	WP	1979-1984	
Life	WP	1979-1984	
Life	TH	1937-1941; 1983-1984	1966-1968; 1981-1982
Life	A	1978-1984	
Mademoiselle	WP	1979-1984	
Maryland	A	1982-1984	
Mechanix Illustrated	A	1977-1984	
Media and Methods	TH	1981-1984	
Media and Methods	A		
Michigan Quarterly	TH		
Modern Photography	TH	1981-1984	
Money	WP	1979-1984	
Money	A	1977-1984	
Motorcyclist	WP	1979-1984	
MS Magazine	WP	1979-1984	
Multinational Monitor	TH		
Mundo	TH		
Nation	TH		1968-1982
National Catholic Reporter	A	1984	
National Geographic	WP	1979-1984	
National Geographic	TH	1913-1984	
National Geographic	A	1959-1984	
National Racquet Ball	A	1980-1984	
National Review	WP	1979-1984	
National Review	TH	1981-1984	1967-1982
National Review	A	1974-1984	

Magazine Title	School	Holdings: Bound/Unbound	Holdings: Microfilm
Natural History	WP	1979-1984	
Natural History	TH	1983-1984	
Natural History	A	1979	
Negro History Bulletin	WP	1979-1984	
New Republic	WP	1979-1984	
New Republic	TH	1981-1984	1968-1982
New York Times (Sunday ed.)	WP	1979-1984	
New York Times Mag. (Compact ed)	TH	1973-1984	
New Yorker	WP	1979-1984	
New Yorker	TH	1981-1984	
Newsweek	WP	1979-1984	
Newsweek	TH	1951-1964; 1981-1984	1965-1984
Newsweek	A	1961-1984	
Oceans	A	1972-1984	
Omni	TH	1983-1984	
Omni	A	1980-1984	
Outdoor Life	WP	1979-1984	
Outdoor Life	A	1982	
Parent's	WP	1979-1984	
Paris Match	TH	1981-1984	
Paris Match	A		
People	WP	1979-1984	
People	A	1980-1984	
Personal Computing	TH		
Personal Computing	A	1983-1984	
Philadelphia	A	1983-1984	
PHP	TH	1983-1984	
Planetary Report	TH		
Poetry	A	1978-1984	
Popular Computer	TH	1983-1984	
Popular Mechanics	WP	1979-1984	
Popular Mechanics	TH	1981-1984	
Popular Mechanics	A	1978-1984	
Popular Photography	WP	1979-1984	
Popular Photography	A	1981-1984	
Popular science	WP	1979-1984	
Popular Science	TH	1981-1984	
Popular Science	A	1973-1984	
Portable Computer	TH		
Proceedings	A	1983-1984	
Psychology Today	WP	1979-1984	
Psychology Today	TH	1983-1984	
Psychology Today	A	1969-1984	
Reader's Digest	WP	1979-1984	

Magazine Title	School	Holdings: Bound/Unbound	Holdings: Microfilm
Reader's Digest	A	1970-1984	
Road and Track	A	1984	
Rolling Stone	WP	1979-1984	
Runner	TH	1983-1984	
Runner's World	A	1984	
Saturday Evening Post	WP	1979-1984	
Saturday Evening Post	A	1978-1984	
Saturday Review	WP	1979-1984	
Saturday Review	TH	1949-1964	1965-1972; 1974-1982
Saturday Review	A	1970-1984	
Savvy	TH		
Scholastic Update	TH		
Scholastic Update (Teacher ed.)	WP	1979-1984	
School Library Journal	WP	1979-1984	
School Library Journal	TH	1981-1984	
School Library Media Quarterly	TH	1981-1984	
Science	TH	1981-1984	1960-1969
Science	A	1979-1984	
Science 80	TH	1981-1984	
Science Digest	WP	1979-1984	
Science Digest	A	1979-1984	
Science News	WP	1979-1984	
Science News	TH		1968-1984
Science News	A	1979-1984	
Science News Letter	TH		1965-1967
Sciences, The	TH	1983-1984	
Scientific American	WP	1979-1984	
Scientific American	TH	1950-1984	1965-1967
Scientific American	A	1979-1984	
Seventeen	WP	1979-1984	
Seventeen	TH	1981-1984	
Seventeen	A	1984	
Ski	A	1983-1984	
Skiing	TH	1981-1984	
Skiing	A	1983-1984	
Sky and Telescope	WP	1979-1984	
Smithsonian	WP	1979-1984	
Smithsonian	TH	1981-1984	
Smithsonian	A	1970-1984	
Social Education	TH	1981-1984	
Society	WP	1979-1984	
Sport	A	1984	
Sporting News	A	1984	
Sports Afield	WP	1979-1984	

Magazine Title	School	Holdings: Bound/Unbound	Holdings: Microfilm
Sports Illustrated	WP	1979-1984	
Sports Illustrated	TH	1981-1984	
Sports Illustrated	A	1984	
T.H.E. Journal	TH		
Teaching & Computers	TH		
Teaching Exceptional Children	TH	1981-1984	
Teen	WP	1979-1984	
Teen	A	1984	
Tennis	A	1982-1984	
Tiempo	A		
Time	WP	1979-1984	
Time	TH	1950-1964; 1981-1984	1965-1984
Time	A	1960-1984	
Today's Health	TH		1965-1967; 1970-1971
Top of the News	TH	1983-	
U.N. Monthly Chronicle	TH		1966-1978
U.S. Catholic	A	1964-1984	
U.S. Naval Institute Proceed.	TH	1981-1984	
U.S. News & World Report	WP	1979-1984	
U.S. News & World Report	TH	1952-1964; 1981-1984	1965-1984
U.S. News & World Report	A	1960-1984	
USA Today	TH	1983-	
Vermont Life	TH	1981-1984	
Vertical File Index	A	1978-1984	
Video Review	A	1984	
Videodisc/Videotex	TH	1983-1984	
Vital Speeches	TH	1964-1984	1973-1974
Vital Speeches	A	1964-1984	
Voice of Youth Advocates	TH	1981-1984	
Washington Post	A	1983-1984	
Wilson Library Bulletin	TH	1981-1984	
Wilson Library Bulletin	A	1978-1984	
Women's Sports	WP	1979-1984	
Women's Sports	TH	1981-1984	
World Press Review	TH	1983-1984	
World Tennis	TH		
Wrestling U.S.A.	A	1983-1984	
Writer, The	A	1978-1984	
Yankee	TH	1981-1984	

APPENDIX G: SUGGESTED ONLINE SEARCHING LOG

ONLINE SEARCHING LOG

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Date	File # And Name	Subject of Search	Connect Time (From Printout)	Cost	Purpose (Circle One)	Name of Searcher	Position (Circle One)	Satisfied With Outcome?	Comments of Searcher —— (Optional) —— Comments of Librarian
					Assignment Reference Question Search Strategy		Student Faculty Administrator	Yes No	
					Assignment Reference Question Search Strategy		Student Faculty Administrator	Yes No	
					Assignment Reference Question Search Strategy		Student Faculty Administrator	Yes No	
					Assignment Reference Question Search Strategy		Student Faculty Administrator	Yes No	
					Assignment Reference Question Search Strategy		Student Faculty Administrator	Yes No	
					Assignment Reference Question Search Strategy		Student Faculty Administrator	Yes No	
					Assignment Reference Question Search Strategy		Student Faculty Administrator	Yes No	
					Assignment Reference Question		Student Faculty	Yes	73
					Assignment Reference Question		Student Faculty	Yes	
					Assignment Reference Question		Student Faculty	Yes	

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APPENDIX H: STUDENTS' COMMENTS FROM QUESTIONNAIRES

Questions 1-5. Did you use [find information in, receive help of staff, friends, family or surrogates in] any of these libraries.

Private, please specify:

Student's comment

March of Dimes

Other, please specify:

Student's comment

Books from library of teacher

My content teacher has many books that I used.

My sister's college texts from Drexel University

Books from friends & teachers

Friend's library at home

I had an interview with a victim.

Art Room

Received books from my content teacher

Interview

Information from someone who help to run the games

Question 1-5. Did you use [find information in, receive help of staff, friends, family or surrogates in] any of these libraries.

Private, please specify:

Student's comment

Haverford College history professor's private library

Wilmington Medical Library

Ashland Nature Center, Audubon Society

I.C.I. Americas

Other, please specify:

Student's comment

Teacher

From a teacher

Teacher

History teacher's library

Teacher's library

Mr. Ten Broeck

Mrs. William's collection of science magazines

Sent away for booklet

Some of it from teacher in school.

Interviews

Someone's quote

I witnessed a child who was abused by his mother. She never bathed, fed or looked after her son. She also beat him.

Books from Hodgson Voc.-Tech.

Pamphlets at a book store

Question 11.

If you located any of the references retrieved online, did any of them provide information that helped you write your paper? If yes, please tell us how:

Student's comment

-bibliographical information

-full article printouts

Sources from family and friends

It supplied me with more information, supporting evidence, and examples.

The magazine articles helped me tremendously.

Helped for thesis

In additional information

A few good insights and some statistics that were helpful.

Facts and an editorial relating to my subject

Most references provided an overview from different perspectives, plenty of hindsight.

Gave me additional information on my topic

Background information

Recent speculation

Much of my knowledge came from these references

Facts -- mostly was my paper

Gave me additional information

There were several microfilm articles that gave useful information.

Helped me with my paper

More information on subject found through search

I read it & got info

They dealt with my thesis directly.

Some gave insight to the paper and were actual cases exactly about my subject.

Info from the compact of New York Times Magazine

Question 11. If you located any of the references retrieved online, did any of them provide information that helped you write your paper? If yes, please tell us how:

Student's comment

They told me more information in a faster and easier way to acknowledge.

Guided me in my writing

It gave me some newspaper articles that I never seen or heard.

Question 15. Please comment on any other ways you gathered information. For example, did you interview people or write for information? List what you think was useful to you.

Student's comment

I just looked up information in the books at the library.

Got help from friends, athletes, family and my content teacher "PDQ" information phone number ("Phone Difficult Questions")

My sister got me information.

All information gathered from libraries. The device most useful to me was the card catalog.

Mostly, in dealing with a literary analysis I spoke with teachers - beyond that, all my research was library oriented.

Used books at home

Just used books

I found that information pamphlets were useful.

Sorry, no other revolutionary means used.

I used the Reader's Guide to Periodical Literature & that helped me find magazine & newspaper articles & the card catalogue.

I interviewed my content teacher about life in Northern Ireland which helped a great deal. I was able to clarify information I was not sure of and also get a basic feel of life in Northern Ireland.

History texts

I checked the card catalogue and found books for background information, then perused the Reader's Guide to Periodical Literature and found a majority of my sources.

Private letters from a primary source were useful.

I talked to teachers (Spanish) and people with knowledge of the subject I was dealing with.

I used books, encyclopedias, and magazines.

I used only books, magazines, and encyclopedias. I did gain some information by watching a television special.

The verticle [sic] file at my neighborhood library was very helpful, also the computer card catalog at Dartmouth University helped a lot also.

I only used books, periodicals and encyclopedias.

I only went thru [sic] encyclopedias and books written on the

subject. I also used magazine articles.

Newspapers.

Just got it out of books.

I wanted to find out as much as I could about child abuse so I watch TV programs and talked to people besides my actual writing for the paper.

My father had many books on John F. Kennedy which I used.

No, just my personal knowledge on how to use the library.

Newspaper article [sic] from the News Journal. Opinions of newscaster and other people (friends, school mates, etc.)

No - just personal knowledge of how to use the library.

Talked with Art teachers, my mom who knows a lot about Art History, got books from friends.

By watching television programs related to my subject matter and discussing the matter with others.

Card catalog, friends references, found books from footnotes in other books

Interview

Talking to someone who knows the topic was useful

I look in the card catalog and got books from my school library.

I just used library books.

I only used books from the library, only 1 reference (encyclopedia) book

I used the card catalog, reader's index

Basically I gathered information from libraries - novels, encyclopedias, periodicals & historical accounts

I wrote for information.

Writing to N.A.S.A. Card catalog.

Question 15. Please comment on any other ways you gathered information. For example, did you interview people or write for information? List what you think was useful to you.

Student's comment

I used the English teacher's books to work my paper.

Books

Card catalog

Reading

We used the school and public libraries and the books used in our report were ones found in the card catalog not by the computer search.

We used the school and public libraries and the books we obtained there -- the computer search didn't come up with anything for us.

Card catalog, encyclopedias, microfiche

I tried to use microfilm, but it wasn't useful for my topic.

Talked to teacher, went to many libraries.

Knowledge of parents

Information in U.S. History class. Interview with father.

I located most of my information through the card catalogue but did some background work with New York Times microfilms.

Found major books on my topic in the school and college libraries.

Used card catalog, and went to where I found my first book, which turned out to be the only place I got any information in book form. There were 3 other books on my topic on the same shelf. Also I used the New York Times on microfilm.

I used microfiche and books.

Card catalog boxes in school library

I only used the school library in order to gather information. I didn't think anything else would help.

New York Times microfilm useful

Used books and articles found from database

Research of printed indexes and microfilm

My previous knowledge of my topic was helpful.

Reading the New York Times on microfilm

Microfilm

Dictionary of American History

New York Times Index, card catalog, suggestions from family, classmates and librarian

New York Times reference books

New York Times reference books, encyclopedias, books

The only other information I got was from reading some books not mentioned on the search.

No -- not this particular paper, but others I have had to call democratic headquarters for information since I couldn't find it anyplace else.

1. Microfilm Index
2. Annals of American History
3. Card catalog
4. Help of librarian

I used microfilm

Microfilm

Encyclopedia & Dictionary of History

Books - reference

Primary source materials and microfilm

Searched thru [sic] card catalogue and periodical guide, looked for books recommended by teacher

I also looked in microfilm, annuals of American History -- these were very helpful in giving me primary sources.

I also gathered information by going to the Black history section of the library (school) and choosing books that looked useful.

I only used reference sources.

Reader's Guide

Used Reader's Guide

Interview, wrote to the Audubon Society

I just gained info from magazines computer search. (I found a few.)

Question 15. Please comment on any other ways you gathered information. For example, did you interview people or write for information? List what you think was useful to you.

Comment

All of it was. Computer, SIRS, magazine articles and books.

Reading in book and writing in own words about what you read.

Interviews with people who had anything to do with my subject.

The microfsh [sic], card catalog, Readers Guide, SIRS

I do not write for information, but my friend told about a couple of magazines on rape like Time, and Ebony the story about Maya Angelou that was very useful for me

Took someones quote

Used some of my personal books

Used school library

As before, I used knowledge of my own about child abuse.

I interviewed people, wrote of some of my experiences.

I only need to get books and ect. [sic], from my school library.

I looked in the Readers Guide for different magazines.

Encyclopedias, marijuana books. Health books. Microfesh [sic] machine.

I thought the school library was very useful to me.

I think mostly was mags. and the newspapers were mostly were [sic] I got my information.

I used a autobiography

Used a book

Gathered from home library

SIRS

The library was useful and all the books had helped a lot. I did a couple of programs on tv to help me with my report.

SIRS, encyclopedia, mags, newspapers

Books, papers, phamplets [sic] & magazines.

I used a science book from 7 grade it help me a lot, and the World Book Encyclopedia. A for alcohol

Magazines and books

Books Original Hendrix by Steve Trashis
Hendrix by Richard Daniels
Hendrix Chappel music company
I used my books and magazines [sic]
My uncle's books about volcanoes
I interviewed people
Wrote to an association
I had a couple of pamphlets with statistics in them.
Interview of two people
Took a school survey
I gathered most of my information from the Unit I School Library.
Everything that was available [sic] to me came in good use.

APPENDIX I: MATERIALS REFERENCED BY STUDENTS

Contents

Page Number

Materials Located in School Libraries

Encyclopedias	1
Government Documents and Pamphlets	1
Incomplete citations	1
Magazines	1
Books	4
Newspapers	9
Other	12

Materials Located in Neighborhood Public Libraries

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Materials Located in Private Libraries

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Materials Located from Unspecified Sources

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Incomplete citations	22
Magazines	22
Books	24
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Non-print materials	26
Other materials	26

Symbols Code:

TypeRef Type of material referenced

enc	encyclopedias
gdoxp	government documents and pamphlets
inc	incomplete citations
j	magazines
m	books
news	newspapers
np	non-print materials
other	other types of materials

where Type of institution in which materials were located

a	school library
b	neighborhood public library
c	regional public library
d	community college library
e	college or university library
f	home library
g	private library
h	other source
ns	student did not provide information

TypeRef	Title	Date	Where
enc	Collier's Encyclopedia	1956	a
enc	Collier's Encyclopedia	1983	a
enc	Encyclopedia Americana	1977	a
enc	Encyclopedia Americana	1977	a
enc	Encyclopedia Americana	1977	a
enc	Encyclopedia Americana	1981	a
enc	Encyclopedia Americana	1983	a
enc	Encyclopedia Britannica	1967	a
enc	Encyclopedia Britannica	1970	a
enc	Encyclopedia Britannica	1971	a
enc	Encyclopedia Britannica	1971	a
enc	Encyclopedia Britannica: Macropaedia	1974	a
enc	Encyclopedia Britannica: Macropaedia	1980	a
enc	Encyclopedia of American History	1976	a
enc	Encyclopedia of American History	1976	a
enc	Encyclopedia of American History	1976	a
enc	Encyclopedia of House Plants	1974	a
enc	Encyclopedia of the Unexplained	1974	a
enc	International Encyclopedia	1976	a
enc	World Book Encyclopedia	1977	a
enc	World Book Encyclopedia	1978	a
enc	World Book Encyclopedia	1978	a
enc	World Book Encyclopedia	1978	a
enc	World Book Encyclopedia	1978	a
enc	World Book Encyclopedia	1978	a
enc	World Book Encyclopedia	1978	a
enc	World Book Encyclopedia	1979	a
enc	World Book Encyclopedia	1979	a
gdoxp	Historical Statistics of the United States	1961	a
gdoxp	State Bulletin	1979	a
inc		1982	a
j	American Heritage	1977	a
j	American Heritage	1978	a
j	American Historical Review	1974	a
j	Current History	1962	a
j	Current History	1972	a
j	Department of State Bulletin	1972	a
j	Editorial Research Reports		a
j	Editorial Research Reports	1982	a
j	Enquiry	1983	a
j	Foreign Affairs	1967	a
j	Harpers	1980	a
j	Harvard Medical School Health Letter	1981	a
j	Integratededucation	1978	a
j	Jet	1983	a

TypeRef	Title	Date	where
J	Journal of American History	1978	a
J	Journal of American History	1981	a
J	Life	1984	a
J	Marriage and Family Living	1981	a
J	Monthly Labor Review	1981	a
J	Ms.	1983	a
J	Nation	1977	a
J	National Geographic	1981	a
J	National Review	1979	a
J	National Review	1980	a
J	National Review	1981	a
J	National Review	1983	a
J	Natural History	1980	a
J	New Republic	1972	a
J	New Republic	1974	a
J	New Republic	1979	a
J	New York Times Magazine	1979	a
J	New York Times Magazine	1981	a
J	New York Times Magazine	1984	a
J	New York Times Magazine	1984	a
J	Newsweek	1951	a
J	Newsweek	1951	a
J	Newsweek	1951	a
J	Newsweek	1951	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1952	a
J	Newsweek	1953	a
J	Newsweek	1953	a
J	Newsweek	1957	a
J	Newsweek	1957	a
J	Newsweek	1957	a
J	Newsweek	1962	a
J	Newsweek	1962	a
J	Newsweek	1962	a
J	Newsweek	1963	a
J	Newsweek	1976	a
J	Newsweek	1980	a
J	Newsweek	1982	a

TypeRef	Title	Date	Where
J	Newsweek	1983	a
J	Omni	1983	a
J	Parade	1982	a
J	Philadelphia Magazine	1984	a
J	Philadelphia Magazine	1984	a
J	Psychology Today	1974	a
J	Psychology Today	1978	a
J	Psychology Today	1981	a
J	Psychology Today	1983	a
J	Reader's Digest	1979	a
J	Reader's Digest	1980	a
J	Runner	1982	a
J	Saturday Review	1952	a
J	Saturday Review	1977	a
J	Science	1980	a
J	Science	1981	a
J	Science	1983	a
J	Science	1983	a
J	Science	1983	a
J	Science Digest	1981	a
J	Science Digest	1982	a
J	Science Digest	1982	a
J	Science Digest	1983	a
J	Science News	1982	a
J	Science News	1982	a
J	Science News	1982	a
J	Science News	1983	a
J	Science News	1983	a
J	Sciences	1979	a
J	Scientific American	1982	a
J	Seventeen	1982	a
J	Seventeen	1983	a
J	Time	1951	a
J	Time	1951	a
J	Time	1951	a
J	Time	1951	a
J	Time	1951	a
J	Time	1951	a
J	Time	1952	a
J	Time	1952	a
J	Time	1952	a
J	Time	1952	a
J	Time	1952	a
J	Time	1952	a
J	Time	1952	a
J	Time	1952	a

Type/Ref	Title	Date	Where
J	Time	1953	a
J	Time	1953	a
J	Time	1974	a
J	Time	1977	a
J	Time	1981	a
J	Time	1981	a
J	Time	1982	a
J	Time	1982	a
J	Time	1982	a
J	Time	1983	a
J	Time	1983	a
J	Time	1984	a
J	U.S. News and World Report	1952	a
J	U.S. News and World Report	1953	a
J	U.S. News and World Report	1977	a
J	U.S. News and World Report	1982	a
J	U.S. News and World Report	1983	a
m	Affairs of State: The Eisenhower Years	1952	a
m	After Hiroshima	1979	a
m	Age of Napoleon	1963	a
m	Age of Reform	1955	a
m	Age of Reform	1955	a
m	Alcoholics - P.N.	1967	a
m	Alcoholism		a
m	American Diplomacy 1900-1950	1967	a
m	American Foreign Policy Since 1945	1977	a
m	American Heritage History of the 20's and 30's	1970	a
m	American Indians, The World of	1977	a
m	American Radicalism	1966	a
m	American Woman: Her Changing Social, Economic	1972	a
m	Annals of America	1968	a
m	Anti-Nuclear Handbook	1978	a
m	Aspirin Age	1949	a
m	Aspirin Age	1963	a
m	Aspirin Age 1919-1941	1949	a
m	Auschwitz Album	1981	a
m	Autobiography of Billy McCune	1973	a
m	Autobiography of Malcolm X	1965	a
m	Battered Child	1973	a
m	Battered Child	1974	a
m	Battles and Leaders of the Civil War	1956	a
m	Bay and the River	1955	a
m	Before Divorce	1972	a
m	Beyond Top Secret Ultra	1978	a

Type/Ref	Title	Date	Where
m	Birth Control and Love	1969	a
m	Black Like Me	1964	a
m	Black Reconstruction	1971	a
m	Blue and the Gray	1950	a
m	Body Time	1971	a
m	Bonaparte in Egypt	1962	a
m	Boys of Summer	1972	a
m	Broca's Brain	1974	a
m	Camus	1972	a
m	Case Against Nuclear Power Plants	1971	a
m	Chemical Feast	1982	a
m	Child Abuse: Intervention and Treatment	1975	a
m	Children: The Challenge	1964	a
m	Civil Rights	1967	a
m	Civil Rights	1973	a
m	Civil War	1947	a
m	Civil War on Western Waters	1956	a
m	Cold War America	1974	a
m	Colonial Period of American History	1964	a
m	Coming of Age in Mississippi	1968	a
m	Companion in Shakespeare Studies	1960	a
m	Conflict and Crisis	1977	a
m	Conflict and Crisis	1977	a
m	Confrontation on Campus	1969	a
m	Conversations with Americans	1970	a
m	Costume Through the Ages	1980	a
m	Cotton Kingdom	1966	a
m	Crisis of the Old Order	1957	a
m	Crisis of the Old Order	1957	a
m	Death Penalties	1982	a
m	Decisive Battles of the Civil War	1962	a
m	Dragons of Eden	1977	a
m	Dreams and Symbols	1969	a
m	Dress and Society	1974	a
m	Drug Dilemma	1969	a
m	Drug Scene	1970	a
m	Energy and Environment	1974	a
m	Eugene V. Debs: A Biography	1962	a
m	European Costume (400 Years of Fashion)	1975	a
m	Facing Life: Youth and the Family in American H	1971	a
m	Facts About Cancer	1981	a
m	Fallout	1969	a
m	Families	1978	a
m	First on the Moon	1970	a

TypeRef	Title	Date	Where
m	Food Additives Book	1982	a
m	Footnotes to American History	1977	a
m	Franklin D. Roosevelt and the New Deal	1963	a
m	Freedoms Ferment	1944	a
m	Germany	1972	a
m	Glory and the Dream	1973	a
m	Glory and the Dream	1973	a
m	Glory and the Dream	1973	a
m	Great Boom and Panic	1965	a
m	Great Crash	1954	a
m	Great Crash	1954	a
m	Great Crash 1929		a
m	Great Depressions	1966	a
m	Great Events from History	1973	a
m	Great Movies	1973	a
m	Harry S. Truman	1973	a
m	Heroes of the Silver Screen	1982	a
m	Herpes	1982	a
m	Historic Landmarks of Delaware and Eastern ...	1963	a
m	History of Rocketry & Space Travel	1975	a
m	History of the Cold War	1962	a
m	History of the Third Reich	1978	a
m	Hitler and Germany	1966	a
m	Hitler and the Beer Hall Putsch	1972	a
m	Hitler's Spies	1978	a
m	Hitler's Wartime Picture Magazine-Signal	1976	a
m	Indispensible Cancer Handbook	1981	a
m	Inequality in America:Sociological Perspective	1971	a
m	Interpretations of Dreams	1950	a
m	Joseph R. McCarthy: Great Lives Observed	1970	a
m	Kennedy	1965	a
m	Kissinger	1974	a
m	Ku Klux Klan	1965	a
m	Land of Promise: A History of the United ...	1983	a
m	Life and Death in a Coral Sea	1971	a
m	Life around the Great Reefs	1977	a
m	Life of the Green Plant	1961	a
m	Lincoln and His Generals	1952	a
m	Lonely Sickness	1974	a
m	Love Bugs	1979	a
m	Lyndon Johnson and the American Dream	1976	a
m	Mainstream of Civilization	1979	a
m	Malcolm X	1970	a
m	Malcolm X Speaks	1966	a

Type/Ref	Title	Date	Where
m	Man Called Intrepid	1976	a
m	Marriage and the Family	1952	a
m	Mediums, Mystics, and the Occult	1975	a
m	Memoirs 1925-1950	1967	a
m	Memoirs by Harry S. Truman: Years of Trial...	1956	a
m	Men and Atoms	1959	a
m	Milestone Jackie Robinson	1969	a
m	Mind Factor	1976	a
m	Mind of the South	1962	a
m	Missile Crisis	1966	a
m	More Potent Than a Drug	1975	a
m	Mr. Lincoln's General U.S. Grant	1959	a
m	Mussolini	1961	a
m	Napoleon Bonaparte	1972	a
m	Napoleonic Wars	1979	a
m	Narcotics and Hallucinogenics	1967	a
m	National Party Conventions	1983	a
m	Negro Revolution in America	1963	a
m	Niels Bohr	1966	a
m	Nuclear Witnesses	1977	a
m	Old Time Punishments	1962	a
m	Once Upon a Pedestal	1974	a
m	Only Yesterday	1931	a
m	Only Yesterday	1931	a
m	Only Yesterday	1931	a
m	Only Yesterday	1957	a
m	Origins of the Second World War	1961	a
m	Paradise Lost	1973	a
m	Parapsychology and the Nature of Life	1975	a
m	Penalty of Death	1980	a
m	Perils of Prosperity	1958	a
m	Perils of Prosperity	1958	a
m	Perils of Prosperity	1958	a
m	Perils of Prosperity	1958	a
m	Perils of Prosperity	1958	a
m	Personal Memoirs of Ulysses S. Grant	1885	a
m	Personality of Shakespeare	1972	a
m	Pictorial History of the S.S.	1977	a
m	Pink Collar Workers: Inside the World of...	1977	a
m	Plain Speaking	1974	a
m	Political Memoir of the Eisenhower Years	1963	a
m	Political Profiles: The Eisenhower Years	1977	a
m	Populist Revolt	1961	a
m	Prefaces to Peace	1943	a

TypeRef	Title	Date	Where
m	Presidential Elections Since 1798	1983	a
m	Protest! Student Activism in America	1970	a
m	Psychic World Around Us	1966	a
m	Psychology for You	1978	a
m	Psychology of Sleep	1966	a
m	Reconstruction: After the Civil War	1961	a
m	Reconstruction: The Great Experiment	1971	a
m	Red Scare: A Study in National Hysteria	1955	a
m	Reflections on the Civil War	1981	a
m	Rendezvous with Destiny	1955	a
m	Republican Ascendancy	1960	a
m	Richard Nixon	1971	a
m	Roosevelt and Hopkins: An Intimate History	1948	a
m	Roosevelt, the Soldier of Freedom	1970	a
m	Roosevelt: The Lion and the Fox	1956	a
m	Roots of American Communism	1957	a
m	Salem Witchcraft, Vol. I	1959	a
m	Science Digest	1984	a
m	Secret of Dreams	1972	a
m	Secret War	1981	a
m	Senator Joe McCarthy	1959	a
m	Sisterhood is Powerful	1970	a
m	Sky Lab	1976	a
m	Social Setting of Intolerance	1964	a
m	Socialism	1970	a
m	Socialism and American Life	1952	a
m	Sourcebook of Food and Nutrition	1978	a
m	Sports in America	1976	a
m	Stonewall Jackson, The Good Soldier	1956	a
m	Strawberry Statement: Notes of a College Rev..	1969	a
m	Strike Force	1972	a
m	Surviving and Other Essays	1978	a
m	Susan B. Anthony	1959	a
m	Television: The Business Behind the Box	1971	a
m	Ten Heroes of the Twenties	1966	a
m	Theory of Criminal Justice	1979	a
m	They Met at Gettysburg	1973	a
m	This is Wendell Wilkie	1940	a
m	To Move a Nation	1967	a
m	Top Secret Projects of World War II	1978	a
m	Toward One World: The Life of Wendell Wilkie	1967	a
m	Tumultuous Years	1982	a
m	Twenties	1975	a
m	U.S. Grant and the American Military Tradition	1954	a

Type/ref	Title	Date	Where
m	Ulysses S. Grant	1900	a
m	Union Portraits	1916	a
m	University and Revolution	1969	a
m	Uprooted	1951	a
m	Virginia - The Old Dominion	1937	a
m	Virus Diseases	1978	a
m	Voices Against Death	1976	a
m	War Against Capital Punishment	1983	a
m	Wayward Cell	1972	a
m	Why the North Won the Civil War	1973	a
m	Why We Can't Wait	1964	a
m	Willkie	1952	a
m	Witchcraft-Connecticut	1908	a
m	Women and Men: Traditions and Trends	1977	a
m	Women and Society	1972	a
m	Women's Lives: Perspectives on Progress and	1977	a
m	Women's Rights	1966	a
m	World Almanac Book of WWII	1981	a
m	World of Manet	1968	a
m	World of Speed	1974	a
m	World of the Formerly Married	1966	a
m	World We Live In	1955	a
news	(Portland, Oregon)	1984	a
news	Bee (Sacramento, Calif.)	1983	a
news	Boston Globe	1981	a
news	Buffalo (N.Y.) Evening News	a	
news	Bulletin & Advertiser (Honolulu, Hawaii)	1984	a
news	Christian Science Monitor	1982	a
news	Evening Journal (Wilmington, Del.)	1983	a
news	Herald Examiner	1983	a
news	Minneapolis Star and Tribune	1984	a
news	New York Daily Times	1854	a
news	New York Daily Times	1854	a
news	New York Daily Times	1854	a
news	New York Daily Times	1854	a
news	New York Daily Times	1855	a
news	New York Daily Times	1855	a
news	New York Daily Times	1855	a
news	New York Daily Times	1857	a
news	New York Daily Times	1860	a
news	New York Daily Times	1866	a
news	New York Times	1912	a
news	New York Times	1917	a
news	New York Times	1919	a

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news	New York Times	1919	a
news	New York Times	1919	a
news	New York Times	1919	a
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news	New York Times	1983	a
news	New York Times	1983	a
news	New York Times	1984	a
news	Pittsburgh Press	1982	a
news	Rhode Island Journal	1983	a
other	Album of American History	1960	a
other	Album of American History	1960	a
other	Annals of America		a
other	Annals of America		a
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1968	a

TypeRef	Title	Date	Where
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1968	a
other	Annals of America	1975	a
other	Annals of America	1975	a
other	Annals of American History	1968	a
other	Annals of American History	1968	a
other	Annals of American History	1968	a
other	Annals of American History	1968	a
other	Annals of American History	1968	a
other	Annals of American History	1968	a
other	Current Biography	1943	a
other	Dictionary of American Biographies	1973	a
other	Dictionary of American Biography	1931	a
other	Dictionary of American Biography	1931	a
other	Dictionary of American Biography	1936	a
other	Dictionary of American History		a
other	Dictionary of American History	1951	a
other	Dictionary of American History	1976	a
other	Dictionary of American History	1976	a
other	Dictionary of American History	1976	a
other	Dictionary of American History	1976	a
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other	Dictionary of American History	1976	a
other	Dictionary of American History	1976	a
other	Dictionary of American History	1976	a
other	Dictionary of American History	1978	a
other	Dictionary of American History	1979	a
other	Editorials on File	1970	a
other	International Library of Negro Life	1968	a
other	Magill's Great Events from American History	1975	a
other	Miami News	1962	a
other	Negro Almanac	1967	a
other	Reference Shelf	1982	a
other	SIRS		a
other	SIRS		a

Type/Ref	Title	Date	Where
other	SIRS		a
other	SIRS		a
other	SIRS		a
other	SIRS		a
other	SIRS		a
other	SIRS		a
other	SIRS		a
other	This Fabulous Century 1920, 1930	1970	a
other	This Fabulous Century 1960, 1970	1970	a
other	This Fabulous Century Vol. V	1969	a
other	This Fabulous Century Vol. VI	1970	a
other	World Almanac	1984	a
enc	Encyclopedia Britannica	1984	b
gdoxp	Contraceptions: Comparing the Options/Dept. of	1982	b
gdoxp	Divorces and Divorce Rates/U.S. Dept HEW	1978	b
j	American Heritage	1967	b
j	American Heritage	1967	b
j	American Heritage	1970	b
j	Art in America	1981	b
j	Glamour	1982	b
j	Good Housekeeping	1982	b
j	McCalls	1982	b
j	National Review	1979	b
j	New Republic	1979	b
j	Newsweek	1982	b
j	People	1982	b
j	Reader's Digest	1981	b
j	Saturday Evening Post	1982	b
j	Science Digest	1982	b
j	Science News	1982	b
j	Science News	1984	b
j	Scientific American	1966	b
j	Time	1983	b
m	Adolf Hitler	1976	b
m	Adopting the Older Child	1978	b
m	Albert Camus	1966	b
m	Alcohol Addiction	1973	b
m	Alcohol and Your Unborn Baby		b
m	Another Chance	1981	b
m	Anti-Nuclear Handbook	1962	b
m	Art of Adoption		b
m	Athletic Revolution	1971	b
m	Atom at Work	1969	b
m	Best and the Brightest	1972	b

TypeRef	Title	Date	Where
m	Big Change: America Transforms Itself	1952	b
m	Biochemistry	1970	b
m	Black Book of American Intervention in Chile	1975	b
m	Black Protest in the Sixties	1970	b
m	Building a Successful Marriage	1958	b
m	Camus: A Collection of Critical Essays	1962	b
m	Children of Special Value	1971	b
m	Complete Book of NASCAR Stock Car Racing	1968	b
m	Cost of Crime	1979	b
m	Crisis in Black and White	1964	b
m	Day of the Lion	1963	b
m	Days of Sadness Years of Triumph	1973	b
m	Devils Front Porch	1970	b
m	Dictionaries	1968	b
m	Drugs and Human Behavior	1970	b
m	Drugs and Pregnancy	1983	b
m	Energy Crisis	1974	b
m	Everything You Need to Know to Stay Married and	1975	b
m	Existentialism: For and Against	1964	b
m	Family, Society, and the Individual	1972	b
m	Fascism in Western Europe	1971	b
m	Fidel Castro	1978	b
m	Films of John Wayne	1970	b
m	Four Came Home	1966	b
m	France	1959	b
m	French Revolution and Napoleon	1964	b
m	Games Alcoholics Play	1971	b
m	General Chemistry, Principles and Structures	1982	b
m	Great Energy Scam: Private Millions vs. Public	1982	b
m	Hall of Fame of Western Film Stars	1969	b
m	Handbook of North American Indians	1978	b
m	Innocence of Dreams	1979	b
m	Last, Best Hope	1967	b
m	Lesson of the Scaffold	1982	b
m	Liquid Cross of Skid Row	1966	b
m	Love and Marriage	1936	b
m	Making Decisions	1979	b
m	Manet and the French Impressionists	1912	b
m	Massachusetts A History	1978	b
m	Memoirs of Harry S. Truman	1956	b
m	Memoirs of Richard Nixon	1978	b
m	Mixed Families	1978	b
m	Mobs and the Mafia	1972	b
m	More Than a Game	1968	b

Type/ref	Title	Date	Where
m	Napoleon Bonaparte	1969	b
m	National Party Conventions 1831-1972	1976	b
m	North American Indians	1967	b
m	Nutrition for Your Pregnancy	1983	b
m	Off the Sauce	1967	b
m	Our Energy Regaining Control	1981	b
m	Pendulum and the Toxic Cloud	1980	b
m	Personal Narratives	1974	b
m	Philosophical Perspectives on Punishment	1972	b
m	Plants-a-Plenty	1977	b
m	Playboy's Illustrated History of Crime	1975	b
m	Politics of Adoption	1976	b
m	Politics of Upheaval	1960	b
m	Popular History of Witchcraft	1973	b
m	Power to Silence	1968	b
m	Pre-Columbian American Religions	1969	b
m	President's War	1971	b
m	Prevention	1980	b
m	Price of Power	1983	b
m	Psychics	1974	b
m	Religions of the American Indians	1979	b
m	Satan Is Alive and Well on Planet Earth	1972	b
m	Smoking for Two	1983	b
m	Study of Delaware Indian Medicine Practices and	1942	b
m	Tragedy of Lyndon Johnson	1969	b
m	Truman Presidency	1966	b
m	Tube of Plenty	1975	b
m	Ups and Downs of Drugging and Duping	1972	b
m	V.D. Epidemic	1975	b
m	Vantage Point	1971	b
m	Vicious Circles	1979	b
m	Voluntary Servitude	1968	b
m	Western	1970	b
m	White and Black: Test of a Nation	1964	b
m	White House Years	1979	b
m	White on Black	1963	b
m	Why We Were in Vietnam	1982	b
m	Witches of Early America	1975	b
m	Years of Infamy	1976	b
m	Years of Upheaval	1975	b
news	New York Times	1979	b
j	Health	1982	c
j	Mosaic	1980	c
j	Science	1982	c

TypeRef	Title	Date	Where
j	Science	1983	c
j	Science	1983	c
j	World Health	1983	c
m	Albert Camus of Europe and Africa	1970	c
m	Beginning	1969	c
m	Berkeley: The New Student Revolt	1965	c
m	Burden and the Glory	1964	c
m	Capitalism and Freedom	1962	c
m	Changing Channels	1983	c
m	Colonial Venture	1966	c
m	Impressionistic Masterpieces	1977	c
m	Manet	1968	c
m	Mind Drugs	1980	c
m	Monetary History of the United States 1967-196	1963	c
m	Mussolini	1982	c
m	Strategy for Defeat	1978	c
m	TV Ritual	1981	c
m	Why We Were in Vietnam	1982	c
news	Miami Herald	1984	c
news	News Journal (Wilmington, Del.)	1983	c
m	Pictorial History of the Mafia	1974	d
inc	Social Abstract.82L9861		e
inc	Social Work		e
j	America	1961	e
j	American Heritage	1974	e
j	Editorial Research Reports	1979	e
j	Education Digest	1981	e
j	Good Housekeeping	1980	e
j	McCalls	1979	e
j	New Scientist	1981	e
j	New Scientist	1983	e
j	Newsweek	1979	e
j	Oceans	1983	e
j	Oceans	1983	e
j	Oceanus	1981	e
j	People	1979	e
j	People	1980	e
j	Phi Delta Kappan	1981	e
j	Psychoanalytical Review	1965	e
j	Psychology Today	1977	e
j	Reader's Digest	1981	e
j	Reporter	1960	e
j	Science	1981	e
j	Science	1983	e

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J	Science	1983	e
J	Technology Review	1983	e
J	U.S. News and World Report	1981	e
J	U.S. News and World Report	1982	e
J	U.S. News and World Report	1982	e
J	Vogue	1980	e
J	Vogue	1984	e
m	100% Natural, Purely Organic, Cholesterol-Free	1983	e
m	Accidental Exposure to Dioxins: Human Health..	1983	e
m	Adolescent Sexuality in Contemporary America	1973	e
m	America's Energy, Reports from the Nation...	1980	e
m	America's Oil Famine, How It Happened and When	1975	e
m	American Heritage History of the 20's and 30's	1970	e
m	American Mafia: Genesis of a Legend	1971	e
m	Booms and Depressions	1932	e
m	Child's Journey		e
m	Collected Papers	1952	e
m	Contraceptions and Catholics	1964	e
m	CRC Handbook of Food Additives	1981	e
m	Depression Decade 1929-1941	1947	e
m	Dioxin: Toxicological and Chemical Aspects	1983	e
m	Great Depression	1934	e
m	Halogenated Biphenyls, Terphenyls, Naphthalenes	1980	e
m	Handbook of Food Additives	1981	e
m	Into the Unknown	1981	e
m	Kidnap The Story of the Lindbergh Case	1961	e
m	Killing at Kent State	1971	e
m	Mafia, U.S.A.	1972	e
m	Menace of Atomic Energy	1977	e
m	Microbes and Morals	1971	e
m	Mind Possessed	1973	e
m	New Student	1966	e
m	Pictorial History of the Mafia	1974	e
m	Processed Food and the Consumer: Additives,	1976	e
m	Radiological Principals and Radiation Safety	1983	e
m	Review of Technological Efficacy of Some ...	1972	e
m	Shakespeare and the Nature of Women	1975	e
m	Slaughter of the Innocents	1971	e
m	Studies in the Psychology of Sex	1942	e
m	Toxicology of Halogenated Hydrocarbons	1981	e
m	Truth about Kent State	1973	e
m	Twenties	1974	e
m	Up Against the Ivy Wall: A History of the...	1968	e
m	Valachi Papers: The First Inside Account ...	1968	e

Type/Ref	Title	Date	Where
m	Veneral Disease and What You Should Know About	1978	e
news	Chicago (Ill.) Tribune	1982	e
other	Webster's New World Dictionary	1976	e
enc	Encyclopedia Britannica	1958	f
enc	Encyclopedia Britannica	1963	f
enc	Encyclopedia Britannica	1970	f
enc	Encyclopedia Britannica	1975	f
enc	Encyclopedia Science Supplement 1982	1981	f
enc	Funk and Wagnalls Encyclopedia	1968	f
enc	New Standard Encyclopedia	1960	f
enc	New Standard Encyclopedia	1960	f
enc	World Book Encyclopedia	1963	f
enc	World War II	1976	f
gdoxp	Managing Stress on the Job		f
j	Chemical and Engineering News	1983	f
j	Chemical and Engineering News	1983	f
j	Discover Magazine	1984	f
j	Grand National Scene	1983	f
j	Grand National Scene	1983	f
j	Grand National Scene	1983	f
j	Grand National Scene	1983	f
j	National Geographic	1968	f
j	National Geographic	1981	f
j	Newsweek	1984	f
j	Psychology Today	1980	f
j	Reader's Digest	1980	f
j	Science	1980	f
j	Science Digest	1982	f
j	Science News	1981	f
j	Science News	1983	f
j	Sports Illustrated	1982	f
j	Time	1982	f
j	Time	1982	f
j	Time	1982	f
j	Time	1982	f
j	Time	1983	f
j	Time	1984	f
m	All About Our Fifty States	1962	f
m	American Pageant	1979	f
m	Booze, Bucks, Bamboozle and You	1978	f
m	British Poetry and Prose	1950	f
m	Burnout	1980	f
m	Doctor's Sensible Approach to Alcohol and Alcohol	1969	f
m	From Slavery to Freedom: A History of Negro ..	1980	f

Type/ref	Title	Date	Where
m	Great Boom and Panic	1965	f
m	Hoover Administration	1936	f
m	Jacobean Drama	1964	f
m	Killers of the Dream	1949	f
m	Land of Promise	1983	f
m	Last Days of Jackson	1971	f
m	Lyndon Johnson and the American Dream	1976	f
m	Mainstream of Civilization	1979	f
m	Negro Revolt	1962	f
m	New Careers in Nursing	1983	f
m	New Earths	1981	f
m	Only Yesterday	1931	f
m	Pharmacist's Guide to Alcoholism		f
m	Red Badge of Courage	1972	f
m	Television and American Culture	1981	f
m	Totem Pole Indians	1964	f
m	Vietnam	1983	f
m	Wilmington: A Pictorial History	1982	f
m	World of the American Indians	1974	f
news	New York Times	1983	f
news	Philadelphia Inquirer	1984	f
other	Annals of America	1976	f
other	Annals of America	1976	f
other	Funk and Wagnalls 1983 Science Yearbook	1982	f
other	Science Year 1969	1969	f
j	Scientific American	1983	g
j	Seventeen	1983	g
m	American Immigration	1960	g
m	Uprooted	1951	g
enc	Britannica Junior Encyclopedia	1975	h
enc	Rock Encyclopedia	1971	h
gdoxp	FAS FACTS/March of Dimes		h
gdoxp	Fetal Alcohol Effects	1983	h
gdoxp	Fetal Alcohol Syndrome/March of Dimes	1981	h
gdoxp	Plant Growth Regulator	1983	h
gdoxp	Pregnant? Before You Drink, Think.../March of D		h
gdoxp	You, Your Baby and Drinking/National Council on	1984	h
j	Family Health	1980	h
j	Journal/Quebec City	1983	h
j	Leisurability	1979	h
j	McCalls	1980	h
j	Nutrition Reviews	1982	h
j	Parents	1982	h
j	People	1983	h

TypeRef	Title	Date	Where
j	Psychology Today	1983	h
j	Seventeen	1982	h
m	After Hiroshima	1979	h
m	American Pageant	1971	h
m	Any Old Way you Choose It	1973	h
m	Baseball's Great Experiment	1983	h
m	Biology	1983	h
m	Burden of Southern History	1961	h
m	Christgav's Record Guide	1981	h
m	Community Psychology and Schools	1976	h
m	Crucial Decade - and After	1960	h
m	Desperate Years	1962	h
m	Don't They Know There's a War On?	1970	h
m	French Painting: 19th Century	1959	h
m	Goldstein's Greatest Hits	1968	h
m	Great Depressions	1966	h
m	Hidden Channels of the Mind	1961	h
m	InterPersonal Cognitive Problem Solving	1982	h
m	It Seems Like Yesterday	1956	h
m	Landscape Turned Red	1983	h
m	Manet	1983	h
m	Manet	1983	h
m	Mental Health Program for Intermediate Elementa	1982	h
m	Modern Tradition: Backgrounds of Modern Lit...	1965	h
m	Munich: 1938	1971	h
m	Only Yesterday	1964	h
m	Oxford History of the American People	1965	h
m	Predictions: Facts or Fallacy	1968	h
m	Probability of the Impossible	1974	h
m	Psi Search	1978	h
m	Ricky and Robinson	1972	h
m	Rock and Roll Will Stand	1969	h
m	Sound of the City	1970	h
m	Technology of Food Preparation	1977	h
m	White House Years	1979	h
news	News Journal (Wilmington, Del.)	1984	h
news	News Journal (Wilmington, Del.)	1984	h
np	"My mother"		h
np	[Interview]	1984	h
other	Newsday	1973	h
other	SIRS		h
other	SIRS		h
other	SIRS		h
other	SIRS		h

TypeRef	Title	Date	Where
other	This Fabulous Century Vol. III	1969	h
enc	Afro-American Encyclopedia	1974	ns
enc	Childcraft	1957	ns
enc	Collier's Encyclopedia	1980	ns
enc	Encyclopedia Americana		ns
enc	Encyclopedia Americana	1979	ns
enc	Encyclopedia Americana	1983	ns
enc	Encyclopedia Britannica	1970	ns
enc	Encyclopedia Britannica: Macropaedia	1973	ns
enc	Encyclopedia of Rock		ns
enc	Encyclopedia of the Unexplained	1974	ns
enc	Funk and Wagnalls Encyclopedia	1954	ns
enc	Funk and Wagnalls Encyclopedia	1954	ns
enc	Funk and Wagnalls Encyclopedia	1954	ns
enc	Funk and Wagnalls Encyclopedia	1954	ns
enc	Funk and Wagnalls Encyclopedia	1954	ns
enc	Funk and Wagnalls Encyclopedia	1954	ns
enc	International Encyclopedia	1976	ns
enc	Rand McNally Pictorial Encyclopedia of Horses	1978	ns
enc	World Book Encyclopedia	1969	ns
gdexp	Barber-Stylists	1980	ns
gdexp	Biological Services Program	1980	ns
gdexp	Cosmetologists	1974	ns
gdexp	Cosmetology	1972	ns
gdexp	Cosmetology	1975	ns
gdexp	Heart, Your Heart and How It Works		ns
gdexp	Ride American Quarter Horse	1983	ns
inc			ns
inc			ns
inc			ns
inc		1980	ns
inc		1980	ns
inc		1982	ns
inc		1983	ns
inc		1984	ns
inc	Bombed, Buzzed, Smashed or Sober	1979	ns
inc	For Parents Only		ns
inc	Human Body		ns
inc	Taggart, Dorothy DuPuy		ns
j	American Hairdresser Salon Owner	1983	ns
j	American Hairdresser Salon Owner	1984	ns
j	Audubon	1969	ns
j	Audubon	1974	ns
j	CO-ED Magazine	1981	ns

TypeRef	Title	Date	Where
J	Fortune	1937	ns
J	Futurist	1982	ns
J	Good Housekeeping	1984	ns
J	Humanist	1978	ns
J	Ladies Home Journal	1982	ns
J	Look	1965	ns
J	McCalls	1973	ns
J	National Beauty School Journal	1983	ns
J	National Review	1979	ns
J	Natural History	1982	ns
J	New Republic	1983	ns
J	New West Magazine	1977	ns
J	New York Times Magazine	1975	ns
J	Newsweek	1957	ns
J	Newsweek	1973	ns
J	Newsweek	1983	ns
J	Newsweek	1983	ns
J	Nutrition Action	1980	ns
J	Nutrition Action	1982	ns
J	People	1983	ns
J	Post Magazine	1982	ns
J	Post Magazine	1982	ns
J	Psychology Today	1983	ns
J	Reader's Digest	1979	ns
J	Redbook	1982	ns
J	Rolling Stone Magazine	1978	ns
J	Science	1977	ns
J	Science	1982	ns
J	Science	1983	ns
J	Science	1983	ns
J	Science	1983	ns
J	Science	1983	ns
J	Science Digest	1980	ns
J	Science News		ns
J	Science News	1981	ns
J	Senior Scholastic	1966	ns
J	Seventeen	1983	ns
J	Time		ns
J	Time	1957	ns
J	Time	1974	ns
J	Time	1977	ns
J	Time	1981	ns
J	U.S. News and World Report	1966	ns
J	U.S. News and World Report	1966	ns

Type/ref	Title	Date	Where
j	U.S. News and World Report	1983	ns
j	U.S. News and World Report	1983	ns
m	Against Rape	1974	ns
m	America in the Twenties	1982	ns
m	American Painting 1900-1970	1969	ns
m	Applied Hypnosis	1979	ns
m	Assassination in America	1977	ns
m	At Dawn We Slept	1981	ns
m	Biology	1983	ns
m	Coming of the New Deal	1959	ns
m	Command Decisions	1959	ns
m	Complete Guide to Hypnosis	1971	ns
m	Computer Dictionary for Everyone	1979	ns
m	Cosmetology	1976	ns
m	Creator of the Blitzkrieg	1975	ns
m	Crime War	1968	ns
m	Crucial Years	1948	ns
m	Crusade in Europe	1948	ns
m	Dick Clark's First 25 Years of Rock		ns
m	Franklin D. Roosevelt	1973	ns
m	From the Crash to the Blitz	1969	ns
m	Great Depression: America 1929-1941	1984	ns
m	Heresies and Heretics	1959	ns
m	History of Second World War	1970	ns
m	History of the New Deal	1944	ns
m	Hypnosis	1972	ns
m	Illustrated History of Organized Crime	1972	ns
m	Incredible Victory	1967	ns
m	Inquisition	1973	ns
m	Inside the Third Reich	1970	ns
m	Last Testament of Lucky Luciano	1975	ns
m	Life and Labor in the Old South	1929	ns
m	Living in Prison	1977	ns
m	Mafia and Politics	1966	ns
m	Mafioso	1976	ns
m	Manual of Correctional Standards	1966	ns
m	Marijuana Reconsidered	1977	ns
m	Marital Separation	1972	ns
m	Mob	1973	ns
m	Mr. Roosevelt's Navy	1975	ns
m	Murder of Chile	1982	ns
m	New Conceptions		ns
m	Of Wolves and Men	1979	ns
m	Pacific War	1981	ns

TypeRef	Title	Date	Where
m	Panic in the Pantry	1976	ns
m	Portable Elizabethan Reader	1965	ns
m	President Roosevelt and the Coming of the War	1948	ns
m	Psychological Stress	1967	ns
m	Rape	1974	ns
m	Rape	1979	ns
m	Rape - Helping the Victim	1978	ns
m	Retreat to the Ghetto	1977	ns
m	Return of the Brown Pelican	1983	ns
m	Rise and Fall of the Third Reich	1960	ns
m	Rising Sun	1977	ns
m	Roosevelt I Knew	1946	ns
m	Sieg Heil	1974	ns
m	Silent Syndicate	1967	ns
m	Speak Out on Rape!	1976	ns
m	Story of My Pelican	1965	ns
m	Strike Force	1972	ns
m	Taste of Courage	1960	ns
m	This Fabulous Century 1920-1930	1969	ns
m	Trail of the Fox	1971	ns
m	United States and World War II	1964	ns
m	Valachi Papers	1968	ns
m	War in the Desert	1952	ns
m	Way the World Works	1975	ns
m	Witchcraft	1965	ns
m	Witchcraft at Salem		ns
m	Witchcraft in the Middle Ages	1972	ns
m	Wolf: A Species in Danger	1981	ns
news	Atlanta Journal	1983	ns
news	Baltimore (Md.) Sun	1984	ns
news	Chicago (Ill.) Tribune	1979	ns
news	Chicago (Ill.) Tribune	1980	ns
news	Chicago (Ill.) Tribune	1984	ns
news	Chicago (Ill.) Tribune	1984	ns
news	Daily News		ns
news	Evening Journal (Wilmington, Del.)	1984	ns
news	Medical Tribune	1982	ns
news	Miami Herald	1982	ns
news	Miami Herald	1982	ns
news	Miami Herald	1984	ns
news	Miami Herald	1984	ns
news	Morning News	1980	ns
news	New York Daily News	1984	ns
news	New York Times		ns

TypeRef	Title	Date	Where
news	New York Times	1981	ns
news	New York Times	1982	ns
news	News and Observer (Raleigh, N.C.)	1984	ns
news	News Journal (Wilmington, Del.)		ns
news	News Journal (Wilmington, Del.)	1980	ns
news	News Journal (Wilmington, Del.)	1983	ns
news	News Journal (Wilmington, Del.)	1983	ns
news	News Journal (Wilmington, Del.)	1984	ns
news	Poland (Me.) Press Herald	1984	ns
news	Providence (R.I.) Journal	1982	ns
news	Providence (R.I.) Journal	1982	ns
news	Providence (R.I.) Journal	1983	ns
news	Providence (R.I.) Journal	1984	ns
news	San Jose (Calif.) Mercury	1984	ns
news	Wall Street Journal	1975	ns
np	Language of Music of the Wolves	1971	ns
np	[Interview]		ns
np	[Survey]		ns
other	Collier's Yearbook Covering 1971	1972	ns
other	News Bank Index	1983	ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns
other	SIRS		ns

APPENDIX J: MATERIALS REFERENCED BY STUDENTS WHICH WERE
CITED ON ONLINE SEARCH PRINTOUTS

Type	ref	Title	Date	Where
j		American Historical Review	1974	a
j		Jet	1983	a
j		Journal of American History	1981	a
j		Nation	1977	a
j		National Review	1981	a
j		National Review	1983	a
j		New Republic	1974	a
j		New Republic	1979	a
j		Newsweek	1976	a
j		Newsweek	1983	a
j		Omni	1983	a
j		Science	1983	a
j		Science	1983	a
j		Science	1983	a
j		Science News	1982	a
j		Time	1974	a
j		Time	1977	a
j		Time	1982	a
j		Time	1982	a
j		Time	1982	a
j		Art in America	1981	b
j		New Republic	1979	b
j		Science	1983	c
j		Science	1983	c
j		World Health	1983	c
j		Newsweek	1979	e
j		Oceans	1983	e
j		Vogue	1984	e
j		Chemical and Engineering News	1983	f
j		Science	1980	f
j		Science Digest	1982	f
j		Science News	1981	f
j		Science News	1983	f
j		Newsweek	1983	ns
j		Rolling Stone Magazine	1978	ns
m		At Dawn We Slept	1981	ns