Bryn Mawr College

Library Survey

by

Carol Walton
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Abstract

Will library patrons be receptive to an online catalog? In a study at Bryn Mawr College Library, users' perceptions of the existing card catalog and their attitudes towards computers were investigated in an attempt to discover the difficulties facing library planners in designing and implementing an online catalog. Results show that users are content with the current card catalog and hesitate changing to a new system. 56% would prefer to keep the card catalog rather than switch to a computerized catalog containing identical information. When the pie is sweetened by indicating that more information and greater convenience could result from an OPAC, only 17% still prefer a card catalog. Studies of use of the public OCLC terminal in Bryn Mawr's main library indicate that confusion and timidity prevent many from utilizing the facility. Greater effort at educating users is needed in order to overcome their resistance to online catalogs.

INTRODUCTION

Bryn Mawr College Library, working together with Swarthmore and Haverford College Libraries, is beginning to investigate the possibility of converting from a traditional card catalog to an online public access catalog (OPAC), one that would meet the needs of patrons and staff equally well. In the last few years, there has been an unprecedented advance in computer technology. Computerized information storage and retrieval systems are becoming more sophisticated and, at the same time, more flexible as they develop into truly interactive systems which mirror human communication. The systems of just a few years ago were rigid and required people to learn to speak the language of the computer. Computers are now beginning to converse in more human language and to be somewhat more forgiving of human error, as the vendors seek to survive in a highly competitive market. The more successful systems avoid verbosity and computer jargon and provide frequent assistance to the user in the form of prompts, precise and informative error messages, and multiple help messages.[1]

Academic and research libraries are beginning to recognize the potential for improved access to information provided by online catalogs that have the capability, among other things, of searching multiple fields such as author, title, date and language of publication simultaneously. Specific features differ from one system to another and the reader is directed to Epstein, Matthews or Salmon[2] for a comparison of the various systems and features. Following the implementation of the Anglo-American Cataloguing Rules 2nd edition (AACR2) in 1981, the card catalog became increasingly cumbersome, due to a proliferation of forms of entry for a person, place, or organization. An online catalog with a built-in authority file would obviate the necessity of searching in several locations for information on a single topic, thus saving time and decreasing user frustration. An online catalog would also be far more current than a manual card catalog could ever be in the under-

staffed world of academic libraries.

In addition to the desire to improve patron access to information, library planners are influenced by the burgeoning expense of a card catalog. Maintaining the card catalog consumes a large and increasing part of the overall budget, both in terms of the direct cost of producing cards and in terms of staff time spent sorting, filing, revising and correcting cards. The difficulty with the cards has been compounded since the Library of Congress, whose guidelines most United States academic libraries follow, developed its own online catalog. The Library of Congress has begun to make more frequent and far-reaching changes in its headings, particularly subject headings, which affect every library that follows its practices. One example of a massive change, in terms of number of cards affected, was the substitution of World War, 1914-1918 for the earlier heading European War. In a manual catalog which attempts to keep up with the changes, cards must be pulled, erased, retyped, revised and refiled. In the case of a change involving thousands of cards, entire sections of the card catalog must be shifted to accomodate the sudden growth of a section of the alphabet and the corresponding decrease in another section. The alternatives are to interfile old and new headings, which confuse the user, or develop elaborate cross-referencing structures directing the user from one area to another and back again. All of the alternatives are labor-intensive and consume staff time which might be used more advantageously to process new materials.

In spite of the obvious benefits, the initial costs of an online catalog can be prohibitive, especially when one considers that so much is as yet unknown about system reliability, user reaction, and the number of terminals needed to provide adequate levels of service. One result of the uncertainty and forbidding expense has been an increase in cooperative ventures involving several similar libraries, like that being discussed by Bryn Mawr, Swarthmore and Haverford College Libraries. Not only is it anticipated that an online

catalog will improve accessibility to Bryn Mawr's collection, it will provide online access to the Swarthmore and Haverford collections as well. With a union catalog for the three library systems, there would be a dramatic rise in the resources available to the students, faculty and staff of all three colleges. Additionally, the cooperation that is developing between the libraries should have the extra benefit of cutting back on unnecessary duplication and allow the libraries to specialize their individual collections somewhat more, thus making optimum use of limited space and money for collection growth.

Given that an online catalog is viewed by library planners as the solution to a variety of problems, what remains is to reduce some of the unknowns about OPACs. The unknown factor of system reliability can only be tested completely once the system is in place and functioning. All vendors make endless promises, but only a user can indicate if a system is really meeting his needs. Careful comparative shopping before purchase, i.e. viewing systems in operation and talking with satisfied and dissatisfied users of a particular system, will ease some of the strain of choosing the most dependable, versatile system for the available money.

From a financial standpoint, the most crucial question facing libraries that are planning to switch from a card catalog to an OPAC is how to determine the number of terminals needed to serve the clientele effectively. Because no academic library has unlimited funds at its disposal, it is imperative that the number of terminals purchased be kept as low as possible without adversely affecting user access to the collection. There is a delicate balance between too few and too many and there are no magic formulas that can be universally applied. John E. Tolle's study[3] attempts to present some guidelines and methodology for determining the number of terminals needed. In his study, prediction of terminal use is made via regression analysis equations, considering such factors as catalog use, reference activity, circulation

activity and building occupancy. A library seeking to determine the number of terminals it needs must define its desired level of service, i.e. how long it is willing to have its patrons wait for access to an OPAC terminal. In order to determine this level of efficiency, the library needs to ascertain user attitudes toward waiting (how quickly will patrons become impatient and annoyed?) and also map out peak periods of catalog use and average length of time spent using the catalog.

However, recent comparative studies of card catalog and OPAC use have revealed several interesting phenomena that challenge the predictability of the number of terminals based on card catalog use. Although the specific figures and percentages vary from one study to another, it has been found that, even though individual searches by experienced users can be carried out much more quickly with an OPAC than with the card catalog, users are spending considerably more time using the OPAC than they did using the card catalog. There is some evidence to indicate that they are accessing the library's collection records more frequently than they did when access was limited to the card catalog. As well as spending more time using the OPACs, it appears that users are dramatically altering their search strategies as well. In earlier studies of card catalog use, author access was found to be the preferred choice of the majority of users. With online catalogs, the preferred method of access has generally been title. But there has been a marked increase in the use of subject searches with OPACs. All of the studies indicate that there is a greater proportion of subject searching in online catalogs than there ever had been with card catalogs. This is true even though subject access is the least developed feature of any of the systems surveyed. There is reason to believe that, once subject searching is fully operational in the various systems, the use of subject access will increase still further. This is especially important to planners because subject searches require more computer time to complete.[4] Library

planners must bear such studies in mind as they seek to predict the number of terminals they will need to purchase for their online catalog.

The third great unknown, in addition to terminal quantity requirements and system reliability, is user reception of OPACs. It is with user attitudes and perceptions that this survey is primarily concerned. No system, no matter how sophisticated, will be adequate if its intended users reject it out of hand or if they do not understand how to manipulate it effectively to get the desired information. While studies have shown that most users do adapt well to online catalogs and many enthusiastically prefer it to the card catalog[5], no library can afford to make such a major transition without first seeking to understand its own particular clientele better. The fears and apprehensions of all users are legitimate and must be taken into account by planners if the new system is to be successful.

HYPOTHESES

Bearing the above considerations in mind, the survey was designed to gather general information on the user population and to test the following hypotheses:

1) Users are basically satisfied with the existing card catalog system.

2) Users are not accustomed to waiting to access the library's collection through the card catalog and would not react well to having to wait to use a computerized catalog.

3) Use of the card catalog is not evenly distributed over the semester or over the hours that the libraries are open. There are discernible peak periods of catalog use.

4) Most people would be receptive to using a computerized catalog, particularly if it provided more information. Greatest resistance is expected from the faculty.

5) Privacy is an important concern for users of an online catalog.

6) Users would welcome remote access to the library's collection from additional locations on campus and would be willing to wait longer for such access just for the added convenience.

METHODOLOGY

An attempt was made to obtain a random sampling of all members of the

campus community, including faculty, students and staff. Non-clerical staff were not queried because it was assumed that they never or infrequently make use of the college's library facilities and their responses would, therefore, have little value for this survey. To achieve randomization, samples were taken at the main library, Canaday, and at the five branch libraries. In addition, approximately 100 questionnaires were distributed to faculty, graduate student, and staff mailboxes. A total of 400 questionnaires were distributed and 248 were completed. With a sample of that size calculated at the 95% confidence level, the sampling error is a relatively modest 6.4%. Both the randomization and the size of the sample speak well for the statistical reliability of the results.

The data-gathering instrument was a self-administered questionnaire (see Appendix A). In February of 1984, a trial questionnaire was administered to 25 people and the results were analyzed using the Statistical Package for the Social Sciences, version ten (SPSS-X). Several major flaws in the questionnaire became apparent as the data was analyzed. It was subsequently revised three times with the assistance of various members of Bryn Mawr's professional staff ~~and~~ with the help of Susan Williamson of Swarthmore College where a similar survey was being planned and has subsequently been carried out. The final draft was pretested on several students and, after a few minor adjustments, was administered during April and May of 1984. The results were analyzed using SPSS-X.

The questions were designed to avoid technical jargon and personal bias, as much as this last can be achieved. All but one of the questions were closed-ended, presenting answers from which the respondent was directed to choose only one. The artificial limiting to one answer caused the respondents the most frequent discomfort, revealing, perhaps, the reluctance of Bryn Mawr staff and students to be codified. Unfortunately, for the simplicity of the computer analysis, questions where multiple responses did occur were

coded as if no answer had been given. This was an attempt on the part of the author to avoid possible bias by selecting just one of the given answers. Missing values were not figured into the percentages for each question. Fortunately, the questions which people found impossible to answer with just one of the choices were evenly distributed throughout the questionnaire and no single question had to be discounted because of too few responses. However, for questions 10 and 11, respondents so frequently indicated that they had no preference that an additional category of "no preference" was added during the coding of the data.

RESULTS

BACKGROUND INFORMATION

Whenever feasible, for the sake of clarity in the tables to follow, perecentages have been rounded off to the nearest integer. In tables where two sets of percentages appear, figures in parentheses represent row percentages and those not in parentheses are column percentages. If only one set of percentages appear, they are column percentages.

Respondents were asked to classify themselves in terms of their standing at Bryn Mawr. Two respondents were unwilling or unable to indicate their relationship to the college. The breakdown of responses appears in Table 1.

Table 1

Breakdown of respondents by categories

Category of Respondent	Frequency
Undergraduate student	143 (57.7%)
Graduate student	46 (18.5%)
Faculty	47 (19.0%)
Staff	10 (4.0%)
Missing cases=2	246 (100%)

Table 2 shows the breakdown of respondents by their general field of study. Two social work graduate students who checked "other" as their field of study were recoded into the social scinces category. Fifteen other people were unwilling or unable to classify themselves by one of the major fields.

Table 2

Breakdown of respondents by field of study

Field of study	Frequency
Humanities	107 (43%)
Social sciences	57 (23%)
Natural sciences	69 (28%)
Other	15 (06%)
	248 (100%)

Respondents were asked to indicate which of the campus libraries they used most often. Their responses to this question are shown in Table 3, with the overwhelming majority indicating that Canady was the library they used most often.

Table 3

Breakdown of respondents by preferred library

Library	Frequency	
Canaday	167 (67%)	
Psychology	5 (02%)	(18%)
Math/Physics	9 (04%)	
Chemistry/Geology	15 (06%)	
Biology	15 (06%)	
Art and arcaheology	31 (13%)	
No response	6 (02%)	
	248 (100%)	

Of those who preferred using either Canaday or the A.A. library, 41% had never used any of the science libraries. Of those who expressed a preference for Canaday or one of the science libraries, 48% had never used the A.A. library, indicating that about half of the respondents developed an attachment to a particular library and stayed with it.

Table 4 shows the crosstabulation of preferred library by field of study. All of the science libraries have been collapsed into one variable for this table. The only surprising result in this table is that 36% of the people who classified themselves as natural scientists prefer to use Canaday instead of the science libraries and 3% use the A.A. library most frequently. One would generally expect a specialist to utilize the library that was designed to cater to his particular interests. The fact that 39%

Table 4

Crosstabulation of preferred library by field of study

Preferred library	Field of study: Humanities	Social sci.	Natural sci.	Other	
Canaday	(49%) 74%	(34) 97%	(15) 36%	(2) 60%	(100%) N=160
Science libraries	(0%) 0	(2) 3	(96) 61	(2) 20	(100%) N=43
A.A. library	(88%) 26	(3) 0	(6) 3	(3) 20	(100%) N=31
	100% N=105	100% N=57	100% N=67	100% N=5	

chi square significance = .0000

missing cases = 14

Table 5

Crosstabulation of preferred library by category of respondent

Preferred library	Category of respondent: Undergrad.	Grad. student	Faculty	Staff	
Canaday	(64%) 75%	(12) 44%	(21) 76%	(3) 60%	(100%) N=165
Science libraries	(59%) 18	(36) 36	(5) 4	(0) 0	(100%) N=44
A.A. library	(29%) 7	(29) 20	(29) 20	(13) 40	(100%) N=32
	100% N=141	100% N=45	100% N=45	100% N=10	

chi square significance = .0005

missing cases = 7

of Bryn Mawr's scientific community prefers a library other than one of the science libraries, even though the other two libraries are inconveniently located at the other end of campus away from their classrooms and offices, seems to indicate that there is a fairly serious problem. For those familiar with Bryn Mawr's facilities, these results can easily be attributed to the serious overcrowding and dilapidated physical facilities of all the science libraries. Since there is little chance that the physical facilities will be improved in the near future, an online catalog with terminals located in convenient locations for science students and faculty could provide a temporary escape valve for the mounting frsutration of Bryn Mawr's scientific community. The chi square significance of .0000 demonstrates that these results are statistically very reliable since in 0 cases out of 10,000 they could have been produced by chance alone.

Table 5 illustrates the breakdown of users of a particular library by relationship to Bryn Mawr. 75% of the undergraduates surveyed preferred to use Canaday Library, a result to be expected. 44% of the graduate students, 76% of the faculty and 60% of the staff also used Canaday most often. Of the total Canaday users, 64% were undergraduates, 12% were graduate students, 21% were faculty and 3% were staff, also to be expected. Of the science library users, 59% were undergraduates, 36% were graduate students, 5% were faculty and 0 were staff. Of the total A.A. clientele, 29% were undergraduates, 29% were graduate students, 29% were faculty and 13% were staff. Again, the only unexpected results were that only 5% of the surveyed users of the science libraries were faculty. The chi square significance of .0005 indicates a statistically significant relationship between the variables. The percentage of faculty users of the other libraries was much higher. This could be due to a sample which included few science faculty members or it could be a function of the problem discussed here previously.

Table 6 shows the breakdown of respondents by their primary reason for

going to the library, with 46% indicating that they use the libraries primarily as a quiet place to study. 22.5% indicated that they went to the library chiefly to use the reference materials, and catalog use came in third with 17% of the respondents indicating that using the card catalog was their principal reason for going to the library. Table 7 crosstabulates the same data by the category of the respondent to show that 56% of the undergraduates go to the library to study and only 9% to use the card catalog. 37% of the graduate students go to a library to study and 8% to use the card catalog. Faculty and staff use the libraries for different reasons. 38% of the faculty listed the card catalog as their primary reason for going to the library and 35% indicated that the main reason was to use the reference books. Of those who indicated that their primary reason was to use the card catalog, 38% were undergraduates, 10% were graduate students, and 52% were faculty members. Those who would be most directly and immediately affected by the closing of the card catalog would, then, be faculty and undergraduates. Of course, there are many more people who make substantial use of the card catalog who did not list it as the primary reason they went to the library.

When queried about their preferred choice of access in the card catalog (question 18), the respondents were fairly evenly divided about which type of search they used more frequently. The results appear in Table 8.

HYPOTHESIS 1: Users are basically satisfied with the existing card catalog system.

Several questions were designed to test this initial hypothesis. Question 13 asked the respondents to generalize about their rate of success in locating information with the card catalog. Table 9 shows the results, with 16% indicating a poor rate of success with the catalog and 84% expressing satisfaction with their ability to locate information with the card catalog. Of those who indicated that they could seldom find what they wanted in the card catalog, 40% were undergraduates and 60% were graduate students. Of those who noted that they had more failure than success using

Table 6

Breakdown of principal reason for going to library

Reason	Frequency
Place to study	82 (46%)
To consult staff	2 (01%)
To use card catalog	30 (17%)
To use reference books	41 (22.5%)
To use reserve room	21 (12%)
To use xerox machine	1 (0.5%)
Other	2 (01%)
missing cases = 69	179 (100%)

Table 7

Crosstabulation of type library use by category of respondent

Reason use library	Undergraduate	Grad. student	Faculty	Staff	
Place to study	56%	37%	0%	20%	
To consult staff	0	0	3	10	
To use card catalog	(38%) 9	(10) 8	(52) 38	(0) 0	(100%) N=29
To use reference	12	26	35	30	
Reserve room	14	11	0	10	
Xerox machine	1	0	0	0	
Other	8	18	24	30	
	100% N=116	100% N=38	100% N=40	100% N=10	

Category of respondent

chi square significance = .0000

missing cases = 44

Table 8

Breakdown by preferred choice of access

Type access	Frequency
Title	55 (23%)
Author	74 (31%)
Subject	60 (25%)
No preference	48 (20%)
Other	4 (01%)
Missing cases = 7	241 (100%)

the card catalog, 62% were undergraduates, 18% were graduate students and 20% were faculty members, demonstrating to some degree that the less experienced users (undergraduates) had less chance of locating what they needed in the card catalog.

When queried further about the effectiveness of the card catalog, most respondents (80%) indicated that when they were unable to locate materials through the card catalog, the fault did not lie with the catalog itself. Rather they expressed a belief that the catalog was merely reflecting that the library lacked the materials (see Table 10). A significant proportion stated that they attributed their lack of success to their own uncertainty about alternative ways to approach the search. Of those who believed that there was a problem with the catalog itself, 86% used Canaday more frequently than the other libraries.

The results generally support the hypothesis of satisfaction with the card catalog as a means of locating needed information.

HYPOTHESIS 2: Users are not accustomed to waiting to access the library's collection through the card catalog and would not react well to having to wait to use a computerized catalog.

The first part of the hypothesis was tested by asking respondents about their experiences with having to wait to use a drawer of the card catalog (questions 16 & 17). 73% of the patrons stated that they had never had to wait to use the card catalog. Of the people who indicated that they had had to wait to use a specific drawer of the card catalog at some time, 24% primarily used the A.A. library (see Table 11). Yet, according to Table 3, only 13% of the total respondents listed the A.A. library as their main library. By looking at the data in Table 11 another way, one sees that 51% of the users of the A.A. library had had to wait to use the card catalog. The chi square significance of .0261 (in 261 cases out of 10,000 the results could have been produced by chance alone) allows us to have confidence in the statistical reliability of the results. These results are clearly a function

Table 9

Breakdown of success rate with card catalog

Catalog success rate	Frequency
Seldom find information	5 (02%)
Less than half the time	35 (14%)
More than half the time	142 (59%)
Almost always find info.	61 (25%)
	243 (100%)

Missing cases = 5

Table 10

Perceived reason for lack of success with card catalog

Reason for failure	Frequency
Library lacks materials	183 (80%)
Uncertain how to search	30 (13%)
Confused filing arrangement	7 (03%)
Other	10 (04%)
	230 (100%)

Missing cases = 18

Table 11

Crosstabulation of waiting for catalog by preferred library

Library used most frequently

Ever waited	Canaday	Psych.	Math/Phys.	Chem./Geol	Biology	A.A.	
no	77%	100%	67%	80%	60%	49%	
yes	(59%) 23	(0) 0	(4) 33	(4) 20	(9) 40	(24) 51	(100%) N=67
	100% N=166	100% N=5	100% N=9	100% N=15	100% N=15	100% N=31	

chi square significance = .0261

Missing cases = 6

of the overcrowded area that houses the card catalog in the A.A. library. The Art and Archaeology Library is the one Bryn Mawr College library where a majority of its regular users have had to wait at some time to use the card catalog. Whether this waiting contributes to patron frustration is a matter of speculation.

When asked whether they <u>often</u> had to wait to use the card catalog, 99.4% indicated that they did not. The one person who did was an undergraduate who generally used Canaday Library. Given that lack of space is not a problem in the Canaday card catalog, one is more inclined to wonder about this one individual than to be concerned about possible frustration resulting from having to wait to use the card catalog.

For the sake of comparison, respondents were also asked (question 24) whether they ever had to wait to use the OCLC terminal that is available for public use in Canaday Library. Of those who had used the OCLC terminal, 41% indicated that they had never had to wait, compared to the 73% who had never had to wait to use the card catalog. The higher percentage who had had to wait to use OCLC is hardly surprising since there is one public terminal and several thousand card catalog drawers. This is precisely the issue that is a matter of such concern to so many opponents to an online catalog. As one of the respondents to this survey wrote, "The number of computer terminals can never be brought up to the number of drawers in a card catalog."

To test the second part of the hypothesis, users were requested to express how long they would be willing to wait to use a drawer of the card catalog (question 20) and how long they would be willing to wait to use a computer catalog (question 27). The results are shown in Table 12 and 13 and indicate very little difference in willingness to wait for the two different types of catalogs. If anything, people expressed a somewhat greater willingness to wait to use the computer catalog, seeming to refute the second part of the hypothesis. When the results are crosstabulated with the category of the respondent

Table 12

Respondents' willingness to wait to use card catalog

How long	Frequency	Cumulative %
Wouldn't wait at all	9 (04%)	04%
Wait about 1 minute	45 (19%)	23%
Wait 2-5 minutes	70 (29%)	52%
Wait 5-10 minutes	28 (12%)	64%
Wait as long as necessary	9 (04%)	68%
Return later	78 (32%)	100%
	239 (100%)	

Missing cases = 9

Table 13

Respondents' willingness to wait to use online catalog

How long	Frequency	Cumulative %
Wouldn't wait at all	9 (04%)	04%
Wait about 1 minute	51 (21%)	25%
Wait 2-5 minutes	82 (34%)	59%
Wait 5-10 minutes	33 (14%)	73%
Wait as long as necessary	10 (04%)	77%
Return later	57 (23%)	100%
	242 (100%)	

Missing cases = 6

(Tables 14 & 15) there does seem to be some relationship between the category of the respondent and the willingness to wait. While in the case of both the card and computer catalog 4% of the total respondents expressed a complete unwillingness to wait, when broken down by category, it is seen that the higher status respondents (i.e. graduate students and faculty) were less willing to wait for the computer catalog than they were for the card catalog. With the card catalog, 88% of thos who were totally unwilling to wait were undergraduates and only 12% were faculty. With the computer catalog, even though the same number of people expressed an unwillingness to wait, the breakdown of who those people were differed. Only 45% of those unwilling to wait to use an online catalog were undergraduates, 22% were graduate students, 22% were faculty and 10% were staff. These results could indicate that faculty and graduate students either have higher expectations for computer catalogs and expect more immediate access to one, or that they have less patience in using a computer catalog as compared to a card catalog. On the surface, these results seem to point to potential difficulties in getting faculty and graduate students to accept a computer catalog as readily as a card catalog. Yet, the high chi square significance scores indicate that the results are not necessarily reliable statistically. While it cannot be said statistically that there is a relationship between the category of the respondent and the willingness to wait to use a certain type of catalog, the switch is, nevertheless, interesting.

Related to the issue of waiting is whether or not patrons are willing to interrupt someone else's extended search if they need to do one quick search with the tool that the other person is using. Questions 29 and 30 queried users about this for a card catalog and a computer catalog. While 77% indicated that they would be willing to interrupt someone's use of a drawer of the card catalog for a brief search of their own, only 27% would be willing to interrupt another's use of a computer catalog. Because of this

Table 14

Crosstabulation of willingness to wait for card catalog by category

How long would wait	Category of respondent: Undergrad.	Grad. student	Faculty	Staff	
Wouldn't wait	(88%) 5%	(0) 0%	(12) 2%	(0) 0%	(100%) N=9
Wait 1 minute	(51%) 16	(18) 19	(29) 28	(2) 11	(100%) N=45
Wait 2-5 minutes	(58%) 28	(22) 36	(17) 26	(3) 22	(100%) N=69
Wait 5-10 minutes	(68%) 14	(11) 7	(14) 8	(7) 22	(100%) N=28
As long as necessary	(56%) 4	(22) 5	(11) 2	(11) 11	(100%) N=9
Return later	(58%) 32	(18) 33	(20) 33	(4) 34	(100%) N=77
	100% N=140	100% N=42	100% N=46	100% N=9	

chi square significance = .7182

missing cases = 11

Table 15

Crosstabulation of willingness to wait for computer by category

How long would wait	Category of respondent: Undergrad.	Grad. student	Faculty	Staff	
Wouldn't wait	(45%) 3%	(22) 5%	(22) 4%	(10) 10%	(100%) N=9
Wait 1 minute	(47%) 17	(27.5) 32	(23.5) 26	(2) 10	(100%) N=51
Wait 2-5 minutes	(59%) 34	(15) 27	(20) 35	(6) 50	(100%) N=81
Wait 5-10 minutes	(67%) 16	(15) 11	(12) 9	(6) 20	(100%) N=33
As long as necessary	(60%) 4	(20) 4	(20) 4	(0) 0	(100%) N=10
Return later	(64%) 26	(16) 21	(18) 22	(2) 10	(100%) N=56
	100% N=140	100% N=44	100% N=46	100% N=10	

chi square significance = .7665

missing cases = 8

greater reluctance to interrupt someone using a computer catalog, it seems likely that users will experience somewhat more frustration while waiting to have access to a computer terminal.

The results seem to support the first part of the hypothesis that users are not accustomed to waiting to access the library's collection, but they do not clearly support or refute the second part of the hypothesis.

HYPOTHESIS 3: Use of the card catalog is not evenly distributed over the semester or over the hours that the libraries are open. There are discernible peak periods of catalog use.

Librarians have long noticed that certain times of a semester seem to witness greater activity at the card catalog, particularly near the end of the semester. Librarians' perceptions of these peak periods may, however, differ from the users' perceptions. Several separate questions were designed to try to determine when the peak periods occur and if they are predictable.

Question 9 attempted to discover how frequently people felt they used the card catalogs. The results, shown in Table 16, indicate that most users (46%) used the card catalog about twice a month.

Table 16

Frequency of card catalog use this semester

How often	Frequency
Never	2 (01%)
Seldom	53 (21%)
Twice a month	113 (46%)
Twice a week	46 (19%)
More than twice a week	32 (13%)
Missing cases = 2	246 (100%)

Question 10 endeavored to ascertain the peak times of catalog use during any given week. As shown in Table 17, more people (28%) preferred to use the card catalogs in the evening than at any other time. The second most preferred time (21%) was between 2 and 5 in the afternoon. 10% indicated that they seldom used the catalog at all during the week.

Table 17

Weekday preference for use of the card catalog

When used	Frequency
8-11 a.m.	25 (11%)
11 a.m.-2 p.m.	22 (10%)
2-5 p.m.	49 (21%)
5-8 p.m.	18 (08%)
8p.m. to closing	65 (28%)
seldom	22 (10%)
no preference	29 (12%)
	230 (100%)
missing cases = 18	

The results indicate that substantial use of the card catalogs may be taking place at times when regular staff members are not there to observe it.

A pattern for weekend use of the card catalogs was sought through question 11. The results of Table 18 indicate that of those who do use the catalog regularly on the weekends, the preferred times are Saturday or Sunday evenings.

Table 18

Weekend preference for use of the card catalog

When used	Frequency
Saturday morning	13 (06%)
12-5 p.m. Saturday	34 (15%)
5 p.m. to closing Saturday	11 (05%)
Sunday 1-5 p.m.	26 (11%)
5 p.m. to closing Sunday	36 (15%)
seldom	89 (38%)
no preference	23 (10%)
missing cases = 16	232 (100%)

Through question 12, an attempt was made to discover if peak use were predictable or if it depended heavily on such things as major assignments or examinations which could occur at any time throughout the semester. In Table 19, it can be seen that 44% of the respondents indicated that they used the card catalog consistently throughout the semester. The second most frequent use occurs right before an examination or paper (40%) and is therefore not predictable, unless one were able to consult with faculty on major assignments. Not surprisingly, 88% of those who indicated they used the catalog most right before an examination or paper were undergraduates. 100% of those who used it before the semester began were faculty, another expected result. 86% of those

who used it in the last month (before finals) were undergraduates (see Table 20). The significance of .0000 indicates that there is a statistically reliable relationship between category of respondent and use of the card catalog throughout the semester. Unfortunately, this is a pattern which will change from semester to semester since it is based firmly on changing assignments.

Question 19 was an attempt to discover how long people used the card catalog each time they used it. 22% of the respondents indicated that they used it each time for less than 5 minutes, 35% for from 5 to 10 minutes, 26% for 10 to 20 minutes and 13% for over 20 minutes each time. Crosstabulated with the category of the respondent, the results are shown in Table 21. The undergraduates tended to use it longer, with 17% indicating that they used it more than 20 minutes at a time. Another 30% of the undergraduates noted that they took from 10 to 20 minutes each time they consulted the card catalog. This could prove significant for determining the number of terminals needed for an OPAC in each location. Since undergraduates use the card catalog for longer periods of time and Table 5 shows that 75% of the undergraduates use Canaday over the other libraries, it stands to reason that Canaday will need the greater number of terminals in order to satisfy demand. The significance of .0007 indicates that this is a statistically reliable relationship between category of respondent and amount of time spent consulting the card catalog. The results are fairly evenly distributed when crosstabulated with field of study, and no discernible patterns appear that might help in the determination of terminal quantity requirements for the other libraries.

HYPOTHESIS 4: Most people would be receptive to using a computerized catalog, particularly if it provided more information. Greatest resistance is expected from the faculty.

The underlying tenet is that people do not have an aversion per se to computers. Various questions were designed to test this hypothesis. The fact that there is an OCLC terminal available for public use in a central location of ~~Canaday~~ Bryn Mawr's main library provided the means of collecting some useful data concerning

Table 20

Crosstabulation of catalog use by category of respondent

Pattern of catalog use	Category of respondent: Undergraduate	Grad. student	Faculty	Staff	
Before semester	(0%) 0%	(0) 0%	(100%) 17%	(0) 0%	(100%) N=8
Within first month	(40%) 5	(27) 10	(27) 9	(6) 11	(100%) N=15
Before exams or papers	(88%) 60	(10) 21	(0) 0	(2) 22	(100%) N=93
Consistently	(34%) 26	(27) 64	(34) 74	(5) 67	(100%) N=101
In last month	(86%) 9	(14) 5	(0) 0	(0) 0	(100%) N=14
	100% N=134	100% N=42	100% N=46	100% N=9	

significance = .0000
missing cases = 17

Table 21

Crosstabulation of catalog time by category of respondent

Time spent in catalog	Category of respondent: Undergraduate	Grad. student	Faculty	Staff	
Less than 5 minutes	(37%) 14%	(35) 44%	(19) 22%	(9) 50%	(100%) N=54
5-10 minutes	(58%) 39	(18) 39	(21) 44	(3) 30	(100%) N=95
10-20 minutes	(69%) 30	(8) 12	(20) 26	(3) 20	(100%) N=62
over 20 minutes	(80%) 17	(7) 5	(13) 8	(0) 0	(100%) N=31
	100% N=143	100% N=43	100% N=46	100% N=10	

chi square significance = .0007
missing cases = 6

user's reactions to computer use.

To test the hypothesis, people wereasked whether or not they had ever used the OCLC terminal available for public use in Canaday. 71% responded that they had not. Of those who had never used OCLC, 62% were undergraduates, 18% were graduate students, 17% were faculty and 3% were staff. Figured the other way, 76% of the undergraduates had never used it, 70% of the graduate students, 64% of the faculty and 40% of the staff also had never used OCLC. (See Table 22) The significance level of .0640 demonstrates a fairly reliable statistical relationship between category of respondent and use of OCLC.

When crosstabulated with library used most frequently, it is interesting to note that 66% of all nonusers of OCLC indicated that they used Canaday more frequently than any of the other libraries. Apparently, use of OCLC is not related to the ready accessibility of the public terminal, but rather has more to do with some characteristic of the respondent.

Of those who had used the OCLC terminal, the largest number (46%) indicated that they had taught themselves to use it by reading the instructions provided by Public Services (see Table 23) The breakdown of method of instruction by category of respondent shows that most people in most groups taught themselves how to use OCLC by reading the instructions. The only exception were the faculty. 33% of the faculty taught themselves, while 38% read the instructions and then asked for help in order to begin (see Table 24). While the high significance level of .6194 does not support the statistical reliability of this crosstabulation, the results do seem to indicate that faculty might require more personal assistance with a computerized catalog than the other user groups.

When the users of OCLC were asked if they had ever asked someone to explain something in one of the OCLC displays, 66% indicated that they had. When broken down by category of respondent, it is seen that 63% of the

Table 22

Crosstabulation of OCLC use by category

Used OCLC	Category of respondent: Undergrad.	Grad. Student	Faculty	Staff	
no	(62%) 76%	(18) 70%	(17) 64%	(3) 40%	(100%) N=174
yes	(49%) 24	(19) 30	(24) 36	(8) 60	(100%) N=72
	100% N=143	100% N=46	100% N=47	100% N=10	

Chi square significance = .0640

missing cases = 2

Table 23

Method of learning to use OCLC

Method	Frequency
Read instructions	31 (46%)
Read & asked	16 (24%)
Asked without reading	9 (13%)
Asked after difficulty	11 (17%)
	67 (100%)

missing cases = 181

Table 24

Crosstabulation of method of instruction by category of respondent

Method of learning	Category of respondent: Undergrad.	Grad. student	Faculty	Staff
Read instructions	50%	54%	33%	50%
Read & asked	19	30	38	0
Asked without reading	16	8	7	17
Asked after problem	15	8	20	33
	100% N=32	100% N=13	100% N=15	100% N=6

chi square significance = .6194

missing cases = 182

undergraduates had asked for assistance, 71% of the graduate students, 17% of the staff and 88% of the faculty had asked for assis ance, again pointing to a greater need for personal assistance on the part of the faculty. The chi square significance for this crosstabulation was .0136, showing a statistically reliable relationship between category of respondent and requested assistance with OCLC.

Question 25 attempted to gauge library users' understanding of what information the OCLC system contained. Table 25 shows that 45% chose the correct answer of some of Bryn Mawr's holdings and some of other libraries' holdings. The remainder chose one of the incorrect choices or admitted that they had no idea what information was available through the OCLC system.

Table 25

User perception of available information on OCLC

Perception	Frequency
All Bryn Mawr books	10 (04%)
Some Bryn Mawr books	7 (03%)
Some Bryn Mawr books & some others	108 (45%)
Subject listing of books	12 (05%)
No idea	102 (43%)
	239 (100%)

Missing cases = 9

When this data was crosstabulated with whether the respondent had ever used OCLC, there were some interesting results (see Table 26). Of those who had used OCLC, 81% chose the correct answer regarding what information the system provided. However, 60% of the people who thought that the system contained information about all of Bryn Mawr's collection (i.e., was a functioning online catalog) had used the system. 57% of the people who thought that it contained information about some of the books that Bryn Mawr owned and no other information indicated that they had used the system. While those two figures may indicate that Public Services has its job cut out for it in educating people about system capabilities, the people who selected one of those two answers were at least partially correct. One feature that is not available from OCLC is any sort of subject access to the materials in its

Table 26

Crosstabulation of perception of OCLC by OCLC experience

Used OCLC before	Perceptions: All BMC books	Some BMC books	Some BMC books +	Subject listing	No idea	
yes	(8%) 60%	(6) 57%	(81) 54%	(4) 25%	(1) 1%	(100%) N=72
	100% N=10	100% N=7	100% N=108	100% N=12	100% N=102	

chi square significance = .0000
missing cases = 9

Table 28

Crosstabulation of reason not used OCLC by category

Reason not used	Category of respondent: Undergrad.	Grad. student	Faculty	Staff	
No need	(52%) 25%	(8) 14%	(38) 64%	(2) 25%	(100%) N=48
Unsure of info.	(77%) 27	(15) 18	(6) 7	(2) 25	(100%) N=34
DisliKe computers	(56%) 5	(0) 0	(22) 7	(22) 50	(100%) N=9
Unaware available	(75%) 6	(25) 7	(0) 0	(0) 0	(100%) N=8
Unsure how to start	(64%) 18	(25) 25	(11) 11	(0) 0	(100%) N=28
Unaware existed	(62%) 18	(28) 29	(10) 11	(0) 0	(100%) N=29
Seldom in Canaday	(33%) 1	(67) 7	(0) 0	(0) 0	(100%) N=3
	100% N=99	100% N=28	100% N=28	100% N=4	

chi square sugnificance = .0003
missing cases = 99

data base. Yet, of the people who selected that particular incorrect answer, 25% had used the OCLC system. One can only imagine their sense of frustration at not being able to get the system to give them the information they thought it contained. The above results are an indication of how difficult the task of training people to use an online catalog will be.

The people who had never used the OCLC terminal were asked why they had not done so. As Table 27 shows, the largest percentage (30%) indicated that they had felt no need for it. Another 21% stated that they hadn't used it because they didn't know what information was available from it. Another 18% were unsure how to begin and still another 18% were totally unaware of it. These figures suggest that use could be increased with a more vigorous educational program about the system. The most troublesome, however, will be the 6% who indicated that they hadn't used OCLC because they preferred not to use a computer terminal. One respondent wrote that the "high-pitched noise from the terminal is unpleasant." Another wrote that "card catalogues are easier and more efficient." Yet another summed it up succinctly by saying, "I hate computers."

Table 27

Reason for non-use of OCLC system

Reason	Frequency
No need	48 (30%)
Unsure of information	38 (21%)
Dislike computers	9 (06%)
Unaware available	8 (05%)
Unsure how to start	29 (18%)
Unaware existed	29 (18%)
Seldom in Canaday	3 (02%)
	160 (100%)

missing cases = 88

When this data was crosstabulated with the category of the respondent, (see Table 28 on previous page) the results were highly reliable statistically. Of those who indicated that they had not used OCLC because they preferred not to use a computer terminal, 56% were undergraduates, 22% were staff and 20% were faculty. 7% of the faculty members surveyed professed an unwillingness

to use a computer terminal, the highest percentage of any group except the staff. The results seem to support the hypothesis that the greatest resistance to an online catalog will be coming from the faculty.

Questions 28 and 31 address the heart of the problem. When asked to choose between a card catalog and a computer catalog, both containing identical information, 56% of the total respondents expressed a preference for the card catalog. When asked to choose between a traditional card catalog and an online catalog that would provide more information in greater depth, 17% still indicated a preference for the card catalog. Even though many of those surveyed objected to question 31 as being "dumb" or "leading", the results clearly justify its inclusion. One undergraduate student wrote that "the serendipity of a card catalog is lost with computerization. I would be at a tremendous loss if the card catalog were removed." Another student preferred the card catalog "because I'd probably take forever unless I knew exactly what I was doing." Even those who checked the computerized catalog in question 31 still expressed concern, such as the student who pleaded, "Please don't convert to a computerized card catalog. We'd have to wait for terminals much longer than for drawers. It's not worth it." Or another who said, "I don't want <u>just</u> a computer catalog - as auxiliary would be nice, though." One student who rejected the idea of an online catalog suggested an alternative: "What would be nice would be a catalogue on each floor."

When these results were crosstabulated with the category of the respondent, some interesting relationships became apparent. For question 28 (Table 29), 48% of the undergraduates preferred a card catalog, 71% of the graduate students, 67% of the faculty and 60% of the staff. Of those who preferred the card catalog, 52% were undergraduates. The chi square significance of .0360 means that in only 360 cases out of 10,000 these results could have been produced by chance alone, signifying that they are statistically very reliable. Even of those who had used OCLC before and were presumably not

Table 29

Crosstabulation of choice of catalog by category

Choice of catalog	Category of respondent: Undergraduate	Grad. student	Faculty	Staff	
Card catalog	(52%) 48%	(22) 71%	(22) 67%	(4) 60%	(100%) N=130
Computer catalog	(71%) 52	(29) 29	(13) 33	(4) 40	(100%) N=102
	100% N=139	100% N=41	100% N=43	100% N=10	

chi square significance = .0360

missing cases = 16

Table 30

Crosstabulation of biased choice by category

Choice of catalog	Category of respondent: Undergraduate	Grad. student	Faculty	Staff	
Card catalog	(33%) 9%	(25) 23%	(35) 30%	(7) 33%	(100%) N=40
Computer catalog	(64%) 91	(17) 77	(16) 70	(3) 67	(100%) N=199
	100% N=141	100% N=43	100% N=46	100% N=9	

chi square significance = .0018

missing cases = 9

biased against computers per se, 50% of the faculty preferred the card catalog, 59% of the undergraduates and 50% of the staff. Perhaps negative experiences using OCLC have influenced their choice.

For question 31 (Table 30), 35% of those who expressed a preference for the card catalog were faculty, 33% were undergraduates, 25% were graduate students and 7% were staff. Even though faculty made up only 19% of the total sample, 35% of those who would cling to a card catalog even when offered a better alternative were faculty. 30% of all the faculty preferred to stay with a card catalog. Only the staff were more conservative, with 33% of the staff surveyed preferring to remain with a card catalog when offered a better alternative. Again, the chi square significance of .0018 indicates a very high statistical reliability for these results.

While the majority of users (83%) would choose a computer catalog if it offered more than the traditional card catalog, thus supporting the first part of the hypothesis, the 17% who would prefer to stay with a card catalog no matter what, represent a significant problem for library planners, particularly when 35% of this group are faculty. As anticipated, faculty seem to be the group most consistently resistant to the idea of an online catalog.

HYPOTHESIS 5: Privacy is an important concern for users of an online catalog.

Several of the questions related to the issue of privacy, either directly or indirectly. The most directly related was question 33 which asked people to indicate if they would feel uncomfortable if someone could see what they were searching on the computer terminal. 83% stated that they would not feel uncomfortable, apparently refuting the hypothesis. Crosstabulating the results by category of respondent or by field of study provided no insights. Approximately 80 to 90% of the people in every category expressed no concern over someone being able to see what they were searching. Some of this indifference may be due to a lack of understanding of the reality of using an online catalog, since most probably have no actual experience

using an online catalog. Yet, other studies have indicated that privacy is an important concern to OPAC users.[6]

Question 32 turned up some less surprising results. 86% of the respondents indicated that they would feel pressured to hurry their searches if someone were standing behind them waiting to use the terminal. Again, 80 to 90% of the people in all categories expressed the same concern. Clearly, library planners should take such concerns into account when planning the number and location of computer terminals for an online catalog. A system where people don't feel able to complete their searches either because of excessive queuing or because of a lack of privacy will not really be meeting the needs of its users.

HYPOTHESIS 6: Users would welcome remote access to the library's collection from additional locations on campus and would be willing to wait longer for such access just for the added convenience.

The final two items on the questionnaire were designed to elicit information pertinent to this hypothesis. Table 31 shows where people preferred to have computer terminals located.

Table 31

Preferred location for OPAC terminals

Location	Frequency
Library	127 (53%)
Computer center	2 (01%)
Dormitories	61 (25%)
Faculty offices	33 (14%)
Other	15 (06%)
	238 (100%)

missing cases = 10

53% of the total expressed a preference for terminals to be located in the library. This figure should actually be somewhat higher because many of the 7% who checked "other" then went on to indicate that they wanted to see terminals in a particular campus library. One person actually seemed to be offended by the possibility of being able to access the library's collection from somewhere other than the library, writing, "Huh? That's what we have

libraries for." One wonders if other people felt this way and simply did not express themselves. Some of those who indicated a preference for terminals to be located in the library still felt that having terminals in other locations was a "good idea." Other written responses to question 34 were "this I like a lot" or "that would be marvelous" or "a great idea." Of those who checked "other", some of the suggested locations of terminals included classroom buildings, seminar rooms and staff offices. Table 32 shows the results of crosstabulating this data with the category of the respondent. There is a statistically very reliable relationship between preferred location of terminals and the category of the respondent, witnessed by the .0000 significance level. As might be expected, 93.5% of those who favored having terminals in faculty offices were faculty members and the other 6.5% were graduate students (faculty to be). A total of 63% of the faculty expressed a preference for having remote access terminals in faculty offices. It seems that there is at least one thing about an online catalog that would please faculty. 97% of those who would like to see terminals in the dormitories were, not surprisingly, undergraduates. While a majority of users preferred to have computer terminals for an online catalog located in the library, this does not preclude their acceptance of terminals in other locations. It seems more to be a reflection of the rather conservative bent of those affiliated with Bryn Mawr College, as evidenced in this survey.

The second part of the hypothesis was tested by the final question, asking people about their willingness to wait for dial-up access to an OPAC. Table 33 shows the results, with 42% indicating that they would be willing to wait up to 5 minutes.

Table 33

Willingness to wait for remote access to OPAC

How long	Frequency	Cumulative %
Wouldn't wait at all	13 (05%)	5%
Wait about 1 minute	27 (11%)	16%
Wait 2-5 minutes	101 (42%)	58%
Wait 5-10 minutes	43 (18%)	76%
Wait as long as necessary	37 (16%)	92%
Return later	18 (08%)	100%

missing cases = 9

Table 32

Crosstabulation of terminal locations by category

Preferred location	Category of respondent: Undergraduate	Grad. student	Faculty	Staff	
Library	(57%) 52%	(24) 73%	(13) 37%	(6) 78%	(100%) N=127
Computer center	(50%) 1	(50) 3	(0) 0	(0) 0	(100%) N=2
Dormitories	(97%) 42	(1.5) 3	(0) 0	(1.5) 11	(100%) N=61
Faculty offices	(0%) 0	(6.5%) 5	(93.5) 63	(0) 0	(100%) N=31
Other	(47%) 5	(47) 16	(0) 0	(6) 11	(100% N=15
	100% N=139	100% N=42	100% N=46	100% N=9	

Missing cases=12 chi square significance = .0000

Table 34

Crosstabulation of remote access waiting by category

How long would wait	Category of respondent: Undergraduate	Grad. student	Faculty	Staff	
Wouldn't wait	(62%) 6%	(8) 2%	(23) 7%	(7) 10%	(100%) N=13
Wait 1 minute	(37%) 7	(26) 16	(33) 20	(4) 10	(100%) N=27
Wait 2-5 minutes	(60%) 44	(22) 50	(13) 29	(5) 50	(100%) N=100
Wait 5-10 minutes	(72%) 22	(5) 5	(16) 16	(7) 30	(100%) N=42
As long as necessary	(54%) 14	(19) 16	(22) 21	(0) 0	(100%) N=37
Return later	(55%) 7	(28) 11	(17) 7	(0) 0	(100%) N=18
	100% N=138	100% N=44	100% N=45	100% N=10	

chi square significance = .1368

missing cases = 11

When compared to Tables 12 and 13, there doesn't seem to ba any appreciable difference in willingness to wait for the different systems. 52% were willing to wait up to 5 minutes to use the card catalog, 59% for a computer catalog and 58% for the remote access hook-up.

When crosstabulated with the category of respondent (see Table 34 on previous page) and compared with Tables 14 and 15, more faculty expressed a total unwillingness to wait for remote access. But a more significant change took place in the group of those willing to wait indefinitely for access. Where before only 4% of the faculty were willing to wait as long as necessary for a computer catalog and only 2% for a card catalog, 21% expressed a willingness to wait indefinitely for remote access hookup to the catalog. Apparently, convenience will go a long way toward softening faculty resistance to an online catalog. The results from these questions tend to support the hypothesis.

CONCLUSIONS

The findings of this survey, while not particularly startling, do underscore the problems of preparing for and starting an online catalog. Bryn Mawr's patrons are fairly content with the status quo and are, therefore, hesitant about trying something new. Many are concerned that a change to an online catalog will disrupt their ability to find the information they require for their study and research. The earlier online catalogs generated primarily negative publicity for the whole concept because of excessive down time, queuing, or difficult search strategies. As one concerned faculty member wrote, "A card catalog never breaks down. The Stanford University Library computer catalog was broken so often during my daughter's four years there that the library simply closed it down." Such concerns must be taken into account by the planning committees as they choose which system will be best for Bryn Mawr.

Bryn Mawr library patrons are not accustomed to waiting to have access

to the collection and expressed little willingness to wait any considerable length of time, regardless of the medium of access. There must be sufficient terminals to ensure that patrons have access to the holdings within 5 minutes or the majority, as indicated in the tables of this study, will be dissatisfied.

It is difficult to gauge when peak usage of the catalog occurs. It appears that late afternoon and evenings are favorite times for using the card catalog, but that behavior is not necessarily automatically transferable to an online catalog. If anything is clear from the survey, it is that catalog use is based upon changing necessities. People use it when they have to, whether for an assignment, paper, examination or to prepare a lecture. Much of the use is on the spur of the moment and is unpredictable. There is no reason to assume that online catalog use will fit any more readily into neat time periods. The card catalog is so popular because of the immediacy of the access it provides, not because the information is always accurate or easy to find. Patrons are understandably concerned about having any sorts of limitations placed on their information-seeking behavior. As one student wrote, "Specifying hours of use would be very limiting."

The survey also clearly pointed out the basic timidity of people in learning to use something new. As the use of the OCLC terminal in Canaday demonstrates, simply providing a terminal doesn't mean that people will use it or understand what service it provides. Instructions placed next to a terminal are sufficient for some, and Bryn Mawr's instructions are better than most, but many people require a more personalized introduction to a computer terminal to help them overcome their trepidation about using one. If the library is going to switch to an online catalog, it must be prepared to launch a vigorous, aggressive education campaign, or else be resigned to a system that will lose touch with many of its more timid users. An academic library cannot afford to operate on the theory of survival of the most

aggressive.

Library planners must also be sensitive enough to ensure users' privacy with an online catalog. While the survey respondents didn't appear concerned with someone being able to see what they were working on, the great majority were sensitive to the implicit pressure of others waiting to use the same equipment.

The library must be prepared to offer users some substantive improvement over a manual catalog. Given a choice between two identical data bases, one manual and one computerized, Bryn Mawr's patrons overwhelmingly preferred the manual system. Yet, if the online catalog contained additional information or if users would be able to access it from the convenience of their offices or places of residence, many would welcome the change.

The experience of other libraries that have switched to OPACs is that users' expectations are raised considerably and they are no longer content with the same information that was accessible with a card catalog. They routinely want access to circulation data, to the status of orders and processing, and they want improved access to some areas poorly covered in most traditional card catalogs, such as periodicals and government documents.[7] Once the users' expectations are raised sufficiently to recognize the capabilities of a computerized system, they will demand more and will, perhaps, be more impatient over processing delays. While an online catalog may seem to besieged librarians to be a panacea, they may find that it creates an entirely new set of demands and pressures.

Footnotes

[1] Hildreth, Charles R. Online Public Access Catalogs : The User Interface (Dublin, Ohio : OCLC, 1982), p. 46.

Matthews, Joseph R. "The Automated Library System Marketplace, 1982 : Change and More Change" Library Journal (March 1983), p. 547-553.

Salmon, Stephen R. "Characteristics of Online Public Catalogs" Library Resources and Technical Services (Jan-March 1983), p. 36-67

[2] Epstein, Susan Baerg. "Buy, build, adapt - or forget it" Library Journal (May 1, 1983), p. 888-889.

Matthews.

Salmon.

[3] Tolle, John E. Public Access Terminals : Determining Quantity Requirements (Dublin, Ohio : OCLC, 1984).

[4] Kaske, Neal K. and Nancy P. Sanders. A Comprehensive Study of Online Public Access Catalogs : An Overview and Application of Findings (Dublin, Ohio : OCLC, 1983), p. 56.

Moore, Carole Weiss "User Reactions to Online Catalogs : An Exploratory Study" College and Research Libraries (JUly 1981), p. 295-302.

Norden, David J. and Gail Herndon Lawrence "Public Terminal Use in an Online Catalog : Some Preliminary Results" College and Research Libraries (July 1981), p. 308-316.

Pease, Sue and Mary Noel Gouke. "Patterns of Use in an Online Catalog and a Card Catalog" College and Research Libraries (July 1982), p. 279-291.

[5] Ibid.

[6] Kaske, p. 44.

[7] Kaske, p. 45.

Bibliography

Bates, Marcia J. "Factors Affecting Subject Catalog Search Success" Journal of the American Society for Information Science (May 1977), pp.161-169.

Epstein, Susan Baerg. "Buy, build, adapt - or forget it." Library Journal (May 1, 1983), pp. 888-889.

-- . "Maintenance of Automated Library Systems." Library Journal (December 15, 1983), pp. 2312-2313.

-- . "Suddenly Last Decade : Automation Arrives." Library Journal (Feb. 1, 1983), pp. 183-185.

Hildreth, Charles R. Online Public Access Catalogs : The User Interface. Dublin, Ohio : OCLC, 1982.

Kaske, Neal K. and Nancy P. Sanders. A Comprehensive Study of Online Public Access Catalogs : An Overview and Application of Findings. Dublin, Ohio : OCLC, 1983.

Matthews, Joseph R. "The Automated Library System Marketplace, 1982 : Change and More Change." Library Journal (March 1983), pp. 547-553.

Meyer, Richard W. et al. "A General Planning Methodology for Automation." Journal of Library Automation (Sept. 1981), pp. 205-209.

Moore, Carole Weiss. "User Reactions to Online Catalogs : An Exploratory Study." College and Research Libraries (July 1981), pp. 295-302.

Norden, David J. and Gail Herndon Lawrence. "Public Terminal Use in an Online Catalog : Some Preliminary Results." College and Research Libraries (July 1981), pp. 308-316.

Pease, Sue and Mary Noel Gouke. "Patterns of Use in an Online Catalog and a Card Catalog." College and Research Libraries (July 1982), pp. 279-291.

Salmon, Stephen R. "Characteristics of Online Public Catalogs." Library Resources and Technical Services (Jan.-March 1983), pp. 36-67.

Szilassy, Sandor. "Penny Wise, Dollar Foolish?" Learning Today (Fall 1981), pp. 69-73.

Tolle, John E. Public Access Terminals : Determining Quantity Requirements. Dublin, Ohio : OCLC, 1984.

Uluakar, Tamer, et al. "Design Principles for a Comprehensive Library System." Journal of Library Automation (June 1981), pp. 78-89.

APPENDIX

BRYN MAWR COLLEGE LIBRARY SURVEY

1. CATEGORY OF RESPONDENT

[ ] undergraduate student
[ ] graduate student (please check one)
[ ] faculty
[ ] other, please specify _____

2. HOW MANY COURSES ARE YOU TAKING THIS SEMESTER?

specify number _____

[ ] not applicable

3. WHAT IS YOUR GENERAL FIELD OF STUDY?

[ ] arts and humanities
[ ] social sciences (please check one)
[ ] natural sciences and mathematics
[ ] other, please specify _____

4. WHICH OF THE BRYN MAWR COLLEGE LIBRARIES DO YOU USE MOST OFTEN?

[ ] Canaday
[ ] Psychology
[ ] Math/Physics (please check one)
[ ] Chemistry/Geology
[ ] Biology
[ ] Art and Archaeology

5. IF YOU CHECKED CANADAY OR THE ART AND ARCHAEOLOGY LIBRARY FOR THE ABOVE QUESTION, HAVE YOU EVER USED ANY OF THE SCIENCE LIBRARIES?

[ ] yes [ ] no

6. IF YOU CHECKED CANADAY OR ONE OF THE SCIENCE LIBRARIES FOR QUESTION NUMBER 4, HAVE YOU EVER USED THE ART AND ARCHAEOLOGY LIBRARY?

[ ] yes [ ] no

7. ON THE AVERAGE FOR THIS SEMESTER, HOW OFTEN HAVE YOU VISITED ANY OF THE BRYN MAWR COLLEGE LIBRARIES FOR ANY REASON?

[ ] never been to any BMC library this semester
[ ] less than once a month
[ ] once a month (please check one)
[ ] a few times a month
[ ] once a week
[ ] about every other day
[ ] once a day or more

8. DO YOU GENERALLY VISIT THE BMC LIBRARIES:

[ ] to have a quiet place to study,
[ ] to consult the library staff,
[ ] to use the card catalog,
[ ] to use the reference materials, (please check one)
[ ] to use the reserve materials,
[ ] to use the xerox machines, or
[ ] to socialize?
[ ] other, please specify _____

9. APPROXIMATELY HOW OFTEN THIS SEMESTER HAVE YOU USED THE CARD CATALOG IN ANY OF THE BMC LIBRARIES?

[ ] have never used
[ ] hardly ever
[ ] about every other week (please check one)
[ ] once, maybe twice a week
[ ] more than twice a week

10. DURING THE WEEK, WHEN DO YOU PREFER TO USE THE CARD CATALOGS IN THE BMC LIBRARIES?

[ ] opening to 11 a.m.
[ ] 11 a.m. to 2 p.m.
[ ] 2 p.m. to 5 p.m. (please check one)
[ ] 5 p.m. to 8 p.m.
[ ] 8 p.m. to closing
[ ] seldom use during the week

11. ON THE WEEKENDS, WHEN DO YOU PREFER TO USE THE CARD CATALOGS IN THE BMC LIBRARIES?

[ ] opening to noon on Saturday
[ ] Saturday noon to 5 p.m.
[ ] Saturday 5 p.m. to closing (please check one)
[ ] opening to 5 p.m. on Sunday
[ ] Sunday 5 p.m. to closing
[ ] seldom use on the weekends

12. DO YOU USE THE CARD CATALOGS MORE:

[ ] before the semester begins,
[ ] in the first month of the semester,
[ ] just before an exam or paper, (please check one)
[ ] consistently throughout the semester, or
[ ] in the last month of the semester?

13. DO YOU THINK THAT YOU FIND WHAT YOU'RE LOOKING FOR IN THE CARD CATALOGS:

[ ] seldom,

[ ] less than half the time,

[ ] more often than not, or (please check one)

[ ] almost always?

14. WHEN YOU CAN'T FIND WHAT YOU WANT IN THE CARD CATALOGS, IS IT GENERALLY BECAUSE:

[ ] the library doesn't seem to have the materials you need,

[ ] you're not sure if there's another way to look up what you wanted, or

[ ] the arrangement of the cards in the catalog is confusing?

[ ] other, please specify _____

15. WHEN YOU'RE IN THE LIBRARIES, DO YOU GENERALLY CONSULT A LIBRARY STAFF MEMBER:

[ ] before you start to use the card catalog,

[ ] only if you haven't been able to find what you needed in the card catalog, or

[ ] to help clarify what you found in the catalog?

[ ] you never find it necessary to ask for assistance with the card catalog

16. HAVE YOU EVER HAD TO WAIT TO USE A SPECIFIC DRAWER OF THE CARD CATALOG?

[ ] yes [ ] no

17. DO YOU OFTEN HAVE TO WAIT TO USE A SPECIFIC DRAWER OF THE CARD CATALOG?

[ ] yes [ ] no

18. WHEN YCU USE THE CARD CATALOG IN ANY OF THE LIBRARIES, DO YOU MORE OFTEN LOOK FOR:

[ ] a specific title of a book or journal,

[ ] a particular person's name, or (please check one)

[ ] a subject or topic, such as United States history?

[ ] no preference

[ ] other, please specify _____

19. ON THE AVERAGE FOR THIS SEMESTER, HOW MUCH TOTAL TIME HAVE YOU SPENT EACH TIME THAT YOU CONSULTED THE CARD CATALOG IN ANY OF THE BMC LIBRARIES?

[ ] less than five minutes each time

[ ] 5 to 10 minutes

[ ] 10 to 20 minutes (please check one)

[ ] over 20 minutes

20. EXCLUDING TIMES WHEN YOU MUST USE A SPECIFIC DRAWER OF THE CARD CATALOG AS SOON AS POSSIBLE, HOW LONG WOULD YOU BE WILLING TO WAIT FOR A DRAWER BEFORE YOU FELT INCONVENIENCED?

[ ] wouldn't wait around at all

[ ] about a minute

[ ] 2 to 5 minutes (please check one)

[ ] 5 to 10 minutes

[ ] as long as it took

[ ] would come back later

21. HAVE YOU EVER USED THE OCLC TERMINAL THAT SITS IN THE AREA BY THE PHONE DIRECTORIES IN CANADAY LIBRARY?

[ ] yes [ ] no*

*IF YOU ANSWERED "NO" TO THE ABOVE QUESTION, PLEASE PROCEED TO QUESTION 25

22. WHEN YOU USED THE OCLC TERMINAL, DID YOU:

[ ] teach yourself from the instructions next to the terminal,

[ ] read the instructions and then ask someone to help you begin,

[ ] ask someone to show you how to use it without having read the instructions, or

[ ] ask for help only if the terminal didn't respond as you expected?

23. HAVE YOU EVER ASKED SOMEONE TO EXPLAIN SOMETHING THAT YOU FOUND ON THE TERMINAL?

[ ] yes [ ] no

24. HAVE YOU EVER HAD TO WAIT TO USE THE OCLC TERMINAL?

[ ] yes [ ] no

25. AS FAR AS YOU'RE AWARE, THE OCLC SYSTEM CONTAINS:

[ ] information about all the books that Bryn Mawr owns

[ ] information about some of the books that Bryn Mawr owns

[ ] information about some books that Bryn Mawr owns and some books that other libraries own

[ ] listings of books by subject (please check one)

[ ] no idea what it contains

26. IF YOU'VE NEVER USED THE OCLC TERMINAL IN CANADAY, IS IT BECAUSE:

[ ] you haven't felt it was necessary for what you wanted,

[ ] you aren't sure what information is available from it,

[ ] you would rather not use a computer terminal,

[ ] you didn't know it was available for general use,

[ ] you weren't sure how to begin, (please check one)

[ ] you never heard of it before, or

[ ] you seldom visit Canaday Library for any reason?

[ ] not applicable

27. IF YOU WERE ABLE TO GET THE INFORMATION YOU CAN CURRENTLY GET FROM THE CARD CATALOGS ONLY FROM A COMPUTER TERMINAL, HOW LONG WOULD YOU BE WILLING TO WAIT TO USE IT BEFORE YOU FELT INCONVENIENCED?

[ ] wouldn't wait around at all

[ ] about a minute

[ ] 2 to 5 minutes (please check one)

[ ] 5 to 10 minutes

[ ] as long as it took

[ ] would come back later

28. IF YOU WERE GIVEN A CHOICE BETWEEN TWO SYSTEMS THAT CONTAINED IDENTICAL INFORMATION, WOULD YOU RATHER USE:

[ ] a card catalog, or

[ ] a computerized catalog?

29. IF SOMEONE WERE USING A DRAWER OF THE CARD CATALOG FOR AN EXTENDED PERIOD OF TIME AND YOU NEEDED TO CHECK ONE ITEM IN THAT DRAWER VERY QUICKLY, WOULD YOU FEEL COMFORTABLE ASKING TO INTERRUPT THAT PERSON'S SEARCH FOR ONE BRIEF MOMENT?

[ ] yes [ ] no

30. IF SOMEONE WERE CONDUCTING AN EXTENDED SEARCH WITH A COMPUTERIZED CATALOG AND YOU NEEDED TO CHECK ONE CITATION VERY QUICKLY, WOULD YOU FEEL COMFORTABLE ASKING TO INTERRUPT THAT PERSON'S SEARCH FOR ONE BRIEF MOMENT?

[ ] yes [ ] no

31. IF YOU WERE GIVEN A CHOICE BETWEEN A CARD CATALOG AND A COMPUTERIZED CATALOG THAT PROVIDED BROADER ACCESS TO THE SAME INFORMATION (ABILITY TO LIMIT SEARCHES BY LANGUAGE, YEAR, ETC. OF PUBLICATION) AND PROVIDED MORE TYPES OF INFORMATION (WHETHER BOOK WAS ON ORDER, CHECKED OUT, ETC.), WOULD YOU RATHER USE:

[ ] a card catalog, or

[ ] a computerized catalog?

32. WOULD YOU FEEL YOU HAD TO HURRY IF SOMEONE WERE STANDING BEHIND YOU WAITING TO USE A COMPUTER TERMINAL?

[ ] yes [ ] no

33. WOULD YOU FEEL UNCOMFORTABLE IF SOMEONE COULD SEE WHAT YOU WERE SEARCHING ON A COMPUTER TERMINAL?

[ ] yes [ ] no

34. IF THE LIBRARY'S CATALOG WERE ACCESSIBLE THROUGH TERMINALS ALL OVER CAMPUS, WHERE WOULD YOU PREFER TO LOOK UP INFORMATION?

[ ] in the library

[ ] in the computer center

[ ] in the dormitories (please check one)

[ ] in faculty offices

[ ] other, please specify _____

35. IF IT WERE POSSIBLE TO DIAL UP THE CATALOG FROM OUTSIDE THE LIBRARY BUT IT TOOK MORE TIME TO GET A RESPONSE THAN IT WOULD IN THE LIBRARY BUILDING ITSELF, HOW LONG WOULD YOU BE WILLING TO WAIT FOR A RESPONSE?

[ ] wouldn't wait around at all

[ ] about a minute

[ ] 2 to 5 minutes

[ ] 5 to 10 minutes

[ ] as long as it took

[ ] would come back later