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Starting Out Right: The Effectiveness of Online Catalogs in Providing Bibliographic Access to Youth

INTRODUCTION

For most librarians and information scientists, the ability of children to access library material or, indeed, information in general is an abstraction. It is seen as an issue of intellectual freedom, something "they" should teach in school or an ability to be taken for granted when helping the young patron in a library setting. For a parent, teacher, or youth services librarian, it may be a source of irritation that kids may not be particularly interested in using the card catalog. The library profession has not looked carefully at how children do use catalogs, nor has it been too honest in its appraisal of just how useable online catalogs are for children. This paper will present the findings of a research project that was designed to ascertain what knowledge children bring to using the catalog, what developmental skills children have that would help them use the catalog, and what success children have with known-item catalog searches. The methodology used in this study may also provide a model for examining the behavior of other user groups for whom interfaces are designed.

As W. David Penniman has suggested earlier in this proceedings, the work of accessing information is done in a social context. The culture of childhood in America is complex, with a legal system that treats youth as a special case, including what access youth may have to information. In the U. S. education system, economic factors have created an interesting gap in opportunities for children. The increasing number of poor and homeless children have little access to information
because of meager environments at home and in school. The social context of children seeking information should not be romanticized. Right now the best weapon against AIDS, drug abuse, and teen parenthood is information: getting kids to know and face the facts.

To begin to look at how institutions, specifically public libraries, might begin to meet both traditional and survival information needs of children, through appropriate catalog access, it might help to sort out some myths from reality.

Myth #1: All children like computers, so all children will like and use online catalogs.

While children may be more used to computers than adults, it appears that computers are still more interesting to and more manageable by males than females. There is not much data for gender difference with elementary school-aged children, but the gap becomes noticeable in the middle grades and widens in high school (Sanders & Stone, 1986, p. 5). Computers are more likely to be available to affluent children than to poor ones. It may also be stretching the truth to assume that children who enjoy computer games or even computer-assisted instruction will necessarily find an online catalog desirable simply because it is online. That is like saying reading a card catalog is as much fun as reading fiction. Even most librarians don’t find this to be true.

Myth #2: Children naturally want to be good information managers.

While it is to be hoped that children want good information, it is unlikely that they enjoy the challenge of finding the information they want. The artistry of online search capabilities is beyond most children. A full MARC record is unlikely to be interesting to a young catalog user who lacks the sophistication to understand much of what is included and whose goal is very concrete. A child is more likely to want the good book that a friend was reading or to be told the capital of Wyoming for the report due tomorrow than to care much about knowing the right subject heading or being able to power search using natural language. The librarian’s goals for library catalogs are often not the same as the child’s goals.

Myth #3: Teaching alphabetization will allow children to be successful online catalog users.

It is common to teach children how to alphabetize and to use a few simple filing conventions as part of a library skills curriculum (Bell
& Wieckert, 1979; Welken, 1967). It is not clear that there is a direct relationship between these activities and independent use of an online catalog. It is likely that children need to understand and practice when to apply the rules, but learning alphabetization is not enough to insure both a successful and an efficient catalog search. This may also be a case of too little, too early. Alphabetization skills are not enough for touch screen designs and not really needed for most keyboard systems (spelling is probably more important for either system) and children seem to have trouble with the conceptual relationships involved in catalog design and use until they become comfortable with logical thinking, at about age twelve.

To explore some realities about bibliographic access for children, research was conducted at the Downers Grove (IL) Public Library (Edmonds et al., 1989). This project was funded by the Carroll Preston Baber Award which is given by the American Library Association to support innovative research on aspects of library technology. As there was no other research on children and online catalogs that could be located, nor recent research on children’s use of the card catalog, it seemed important to expand the project to include children’s use of both card and online catalogs, so that a comparison of the two could be made.

The need for evaluation of online catalogs goes beyond acceptance or comfort in the use of the computer. Accepting computer technology and using hardware is a first step to using online catalogs, but the more important question is whether children can actually use existing online programs, i.e., the software, to find needed materials. Of particular concern are the developmental skills required by the interactive software. Can children understand information presented on the catalog screen? Are they generally capable of understanding search methods to be used? Does the online catalog offer any advantages or disadvantages when compared to the traditional card catalog? Answers to these questions will help software designers and librarians define the parameters of effective use of online catalogs by children, and plan modifications in the online catalog, in bibliographic instruction, and in reference/reader’s advisory services.

RESEARCH PLAN

This study evaluates children’s use of an online catalog to gain bibliographic access to materials at the Downers Grove Public Library (DGPL). The study also evaluates the children’s ability to use the DGPL card catalog. Although most libraries close their card catalogs shortly
after opening the online catalog, the DGPL chose to maintain its card catalog pending resolution of some specific problems associated with the online database. DGPL touch terminals were used to access a CLSI online catalog (OPAC terminal) (Rice, 1988, p. 14). A specific set of tests was developed to determine if the children had the necessary skills to effectively locate and interpret bibliographic information as presented by both forms of the catalog.

A sample of children in fourth grade (nine and ten year olds), sixth grade (eleven and twelve year olds) and eighth grade (thirteen and fourteen year olds) was tested to see if their skill development would allow them to follow the online catalog protocols and interpret information presented on the screens in order to identify materials in the library’s collection. In addition to observing student use of the library’s online and card catalogs, general skill level was measured by a written test (see Appendix A). The children were also asked about their preferences about online versus card catalog use. The skills test included items on alphabetizing individual words, names and phrases, and applying simple filing rules for ordering titles, authors and subjects. During the observation/interview, randomly selected students demonstrated actual skills in manipulating the card or online catalog. The research observers noted the child’s ability to find call numbers for known items held by the DGPL and the child’s efficiency in finding bibliographic data (see Appendix C).

Students were given a card with a title, author, or subject heading printed on it and were instructed to find in the catalog the specific title, any book by the listed author, or any book on the given subject. Each student had the opportunity to do a title, author, and subject search, though the student could decline to do more than one search or the observer could excuse the student who was not making progress in a search. For searches in either catalog, students were asked to find the call number once the search item entry was located. If the student said the call number aloud or pointed to it, the search was considered a success.

Sample

Each grade was represented by over fifty students and the population was roughly divided into thirds for the fourth, sixth, and eighth grades. The sample was also fairly evenly divided by gender. The students reported being regular users of the DGPL with about 68 percent using the library once or more a month and about 10 percent never having used it. The older students were fairly familiar with the OPAC terminals and very familiar with the card catalog. Only about a third of the fourth
graders had used the OPAC previously. More males had used the OPAC, but males and females had used the card catalog about equally. The students in the study had received instruction in library skills as part of a district-wide school library instruction program in which fourth graders are introduced to the card catalog and sixth graders are introduced to simple filing rules.

**Preference Survey**

Children perceived that the card catalog was easier to use, perhaps because they were more familiar with it. Ease of use was the predominant reason for stating preferences. The majority of children in all grades and of both genders preferred using the card catalog over the OPAC terminal (68 percent to 16 percent). The remaining 16 percent had no preference. Lack of familiarity with the OPAC was often the reason given for using the card catalog, implying that the card catalog was preferred by default. While most students were able to express an opinion about catalog preference, there seemed to be no strong allegiance to either format.

**Skills Test**

In general, sixth and eighth graders demonstrated moderate knowledge of alphabetizing and filing rules, but more than fifty percent of the fourth graders were unskilled (Table 1). There was very little difference in performance by gender. All students did well on simple alphabetizing, but had difficulty with questions that required knowledge of specific filing rules or multiple-word phrase alphabetizing. On the basis of the skills test, it would be predicted that students would have difficulty using either the card catalog or the OPAC. It could also be expected that fourth graders would be the least successful, while the eight graders would have the best success rate.

<table>
<thead>
<tr>
<th>Grade</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled (95-115)</td>
<td>5</td>
<td>6</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>6.17%</td>
<td>9.38%</td>
<td>20.97%</td>
<td>11.59%</td>
</tr>
<tr>
<td>Moderately Skilled (75-95)</td>
<td>47</td>
<td>48</td>
<td>130</td>
<td>62.80%</td>
</tr>
<tr>
<td></td>
<td>43.21%</td>
<td>73.44%</td>
<td>77.42%</td>
<td>77.42%</td>
</tr>
<tr>
<td>Unskilled</td>
<td>11</td>
<td>1</td>
<td>53</td>
<td>25.60%</td>
</tr>
<tr>
<td></td>
<td>50.62%</td>
<td>17.19%</td>
<td>1.61%</td>
<td>1.61%</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>64</td>
<td>62</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
Observations

In the card catalog observations, fourth graders were much less skilled in locating the call number than the older students (Table 2). Using the OPAC, students were far less successful (Table 3). There were 65 percent successful searches with the card catalog as compared to almost 18 percent success with the OPAC. No fourth grader was successful with the OPAC. As well as gathering data on success rate, data were collected on the effectiveness of both the card and online searches. Based on the number of touches online or the use of the card guides in the card catalog, sixth and eighth graders were moderately efficient (i.e., made fewer mistakes and had to start over less often) and fourth graders were inefficient. Students were more efficient when using the card catalog than when using the OPAC. Females and males had the same patterns of performance during the observations.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Call Number Identification-Card Catalog by Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Correct call number</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>33.33%</td>
</tr>
<tr>
<td>No call number given</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>66.67%</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Call Number Identification-Online Catalog by Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Correct</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>25.64%</td>
</tr>
<tr>
<td>Wrong</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
</tr>
<tr>
<td>Number of attempts</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
</tr>
</tbody>
</table>

RESEARCH FINDINGS

The children in this study did not have knowledge of many rules, nor did they seem to be able to understand useful concepts (e.g., between, doing things in a standard order or sequence, being precise)
well. Naïve users of any age will need to increase knowledge, practice sequencing, and concentrate on accurate task performance. The older students were better able to correct errors and were more knowledgeable than the younger ones, though few students demonstrated any sophistication in catalog use. It was found that, because use of the catalog can be complex, children who are not yet developmentally capable of mastering necessary logic for the catalog may require simpler library catalogs.

The test of skills, as well as the selection of sample search items, simplified the task of a student finding necessary information. Students were not asked to accomplish complex searches. Given that students did not demonstrate mastery of simple and moderately difficult rules and searches, this choice seems to have been a reasonable one. But one needs to be mindful that if students enter the library to find materials, their "real" searches will not necessarily be as straightforward as the ones presented to them in this project. Logically, one would expect students to have a lower success rate when they are performing more complicated searches. For example, students were not asked to demonstrate knowledge about how numbers are treated in a title or about catalog conventions for eras in U. S. history. Yet students might need information on the Civil War or need to locate 1984 by George Orwell. It is appropriate to view skill attained by subjects in this project as the upper limit of performance. It is unlikely that these students would perform better on a wider variety of searches that represent their real information needs.

While the findings of this research have implications for both bibliographic instruction and reference service, the findings about interface design are more closely related to this conference. Instructional plans and changes in the reference interview can be adapted equally well for both the card catalog and the OPAC. The OPAC, however, is much more receptive to design changes than the card catalog. Although subjects were more skilled at using the card catalogs than the OPAC, it is not reasonable to conclude that the card catalog should automatically be the catalog of choice for children. As design changes are made, OPAC will become the appropriate choice.

There are three areas where interface design could be changed to improve bibliographic access to children. Initially, the sequences or steps presented should be reduced and simplified. Children have as many as twelve screens to manipulate and five different screen designs to interpret. Since the card catalog offers four basic steps (file selection, drawer selection, card selection and card interpretation), the OPAC should be designed to parallel more closely this simpler model.

Secondly, the individual screen designs need improvement. Since
children have some trouble searching alphabetically, it would be helpful to reduce the number of choices offered at one time. The OPAC screens offer eleven terms to read and thus eleven choices to make. This can be overwhelming. A series of natural language questions such as "Does your word come alphabetically between hat and hot?" would be easier for children than presentation of word lists. Children had trouble understanding the entry screen. It contained too much information and too high a percentage of print on the screen. The lines should be placed farther apart with larger print and less information. It may be possible to present the patron with a simple bibliographic entry, such as on a bibliography, and allow access to the shelf list on a second screen. Unsophisticated patrons rarely need a full citation. The other screen design needing improvement is the help screen. Help messages should be tailored to each kind of error that can be made, and assistance targeted to the particular error only. Generic help screens ask the patron to read through extra information to determine what steps are necessary to proceed.

The third area of concern in interface design is that instruction and/or coaching should be provided online. Front end instruction can be designed to lead patrons through a variety of search possibilities. If patrons are knowledgeable users, this instruction can be bypassed, or, if users find they need help in the middle of a search, they can move to a diagnostic mode ("Are you sure of the spelling of your search term?", "What other, related terms could you use?") or a coaching lesson. The great strength of computers is that they may be used in different ways by each user, but this capability is not evident in this OPAC system.

The findings of the Baber Research Project present librarians with an opportunity to consider children's accessibility to a library's bibliographic records and the difficulties they encounter. These initial efforts to isolate and quantify the steps taken by users of library catalogs need to be replicated in other settings. For software designers and online catalog vendors, the information gained may provide a framework for future improvements. Based on this research, there can be a heightened sensitivity and awareness for the multiple problems experienced by children attempting to locate materials using library catalogs.

CONCLUSION

While this research found no real gender difference in performance on the OPAC, or any other measure, there seems to be some evidence that not all children approach the OPAC in the same way. Grade level
and developmental level seem to be predictors of how successful children will be in using library catalogs. The observations showed how children dealt with frustration. Some gave up, some moved into an almost frenzied activity mode and did not want to stop, and others stepped back and tried to figure out the rules or concepts that would lead to success. Individual personality seems to have some effect on how children used the OPAC. The children, generally, were very excited about being in an experiment. (They seemed to expect a laboratory and Dr. Frankenstein!) They were cooperative, but expressed frustration with the OPAC and did not seem swayed for or against the catalog because it was online. Feelings about computers in general do not seem to affect use of the OPAC.

It also seems that children are different from adults in being able to understand directions, in doing things in order, and in being precise about what they are doing. One OPAC direction is, "Choose the word that comes alphabetically before the term you are looking for." Even the youngest students were able to do this, but if the student was looking for the word "octopus" he or she might start with "kangaroo," because "k" comes before "o." Since the database is large, this lack of precision leads to lack of success. Many children tried to use the help function, but couldn't choose the correct help message to solve their particular problem. It would be interesting to observe adults to see how they would differ from our young sample.

Though these children had been instructed on how to use the catalog and had some ideas about filing rules from school, they were not adept at applying them at the public library. They used a card catalog at school but had no real idea that some of the same rules might apply on the OPAC. Since the skills test used was made up of items from standard library skills curricula and children had moderate mastery of those items, it would suggest that what is taught and what is needed differ from one another.

Though this study is very preliminary, a few suggestions may be in order as to what might be done to make children more successful OPAC users. First, of course, there needs to be further study using other online catalogs, both replication of the outlined method and the development of other ways to evaluate user competence. Vendors need to field test online catalogs with children to see what help is needed and to adapt screen design to this user group's level of understanding. Systems need to use the strength of computers to build in flexibility, so each user has choices about how much help he or she needs, how fast he or she can proceed, and how full an entry is needed. Librarians need to be realistic about how much help children will need. "Go look it up" has long been discouraged as part of the reference interview, not
so much because it is rude, as because it is an impossible task for many young patrons. Lastly, librarians and vendors need to address the patron's need for useful instruction. For children this instruction needs to be multifaceted, including both concepts and details. It needs to be a part of the reference interview and imbedded in the online catalog.

While much is still unknown about how people use catalogs, a lot is known. Librarians need to take steps to design catalogs based on user needs rather than technical capability. Patrons are more than ready for easier-to-use catalogs.
APPENDIX A

ALPHABETIZING AND PREFERENCE SURVEY
BABER RESEARCH PROJECT
DOWNERS GROVE PUBLIC LIBRARY

NAME ____________________________________________________________

SCHOOL _________________________________________________________

GRADE _________________________________________________________

BOY _______ GIRL _______

DATE __________________________________________________________

1. In the last year, how often have you visited the Downers Grove Public Library?
   _____ More than once a month
   _____ Once a month
   _____ Less than once a month
   _____ Never

2. Have you ever used the PAC terminals (online catalog) to locate materials in the Downers Grove Library?
   _____ Yes  _____ No

3. Have you ever used the card catalog to locate materials in the Downers Grove Public Library?
   _____ Yes  _____ No

4. Which catalog do you prefer to use?
   _____ PAC terminal (online catalog)
   _____ Card catalog
   _____ No preference

Why? ____________________________________________________________

_________________________________________________________________

_________________________________________________________________
1. Write the letter that comes before each of these letters in the alphabet. Example: ______ z
   ______ c  ______ m
   ______ q  ______ i
   ______ o  ______ v
   ______ j  ______ e
   ______ r  ______ x

2. Write the letter that comes after each of these letters in the alphabet. Example: a ______
   ______  f  ______  u  ______
   ______  w  ______  k  ______
   ______  p  ______  d  ______
   ______  h  ______  n  ______
   ______  s  ______  l  ______

3. Number these words in alphabetical order. Example: ______ cat
   ______ dog
   ______ apple
   ______ used
   ______ wear
   ______ vine
   ______ tear
   ______ quiet
   ______ open
   ______ pour
   ______ robin
4. Number these words in alphabetical order.

   ____ dove
   ____ dwelling
   ____ dear
   ____ dyed
   ____ dry
   ____ during
   ____ date
   ____ diet

5. Number these words in alphabetical order.

   ____ poster
   ____ porcupine
   ____ power
   ____ poultry
   ____ possess
   ____ porcelain
   ____ powder
   ____ positive

6. Authors and titles.

   Does *Little Pear* come before or after “Little, Jean” in our card catalog?

   ____ before
   ____ after

   Does *The Bell Witch* come before or after “Bellairs, John” in our card catalog?

   ____ before
   ____ after
Does *Wildlife on the Watch* come before or after "Wilde, Oscar" in our card catalog?

_____ before

_____ after

7. Pretend these are labels on the card catalog. Write down the drawer number where you would look for each author or title.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>4.</td>
<td>7.</td>
<td>10.</td>
</tr>
<tr>
<td>A-B</td>
<td>Dd-Do</td>
<td>Hep-Jan</td>
<td>M-Mac</td>
</tr>
<tr>
<td>2.</td>
<td>5.</td>
<td>8.</td>
<td>11.</td>
</tr>
<tr>
<td>C-Ch</td>
<td>Dp-Goh</td>
<td>Jao-La</td>
<td>Mb-Mi</td>
</tr>
<tr>
<td>3.</td>
<td>6.</td>
<td>9.</td>
<td>12.</td>
</tr>
<tr>
<td>Ci-Da</td>
<td>Goi-Heo</td>
<td>Le-Lz</td>
<td>Mj-Mz</td>
</tr>
</tbody>
</table>

1. *Moominland Winter* _____
2. *Is That You Miss Blue?* _____
3. *He's My Brother* _____
4. *Candles, Cakes, & Donkey Tails* _____
5. *Einstein Anderson, Science Sleuth* _____
6. McGowan, Tom _____
7. Fradin, Dennis _____
8. Hest, Amy _____
9. Dewey, Ariane _____
10. *Hepzibah* _____
11. *Mr. Popper's Penguins* _____
12. *Dr. Doolittle* _____
13. Goffstein, Brooke _____
14. *Gravity is a Mystery* _____

8. Number these titles in alphabetical order as they appear in our card catalog.

_____ Saints for All Seasons

_____ St. Patrick’s Day

_____ The Saints

_____ Saint Jerome
9. Number these titles in alphabetical order as they appear in our card catalog.

- Ah-Choo
- The ABC's
- A Horse Called September
- A is for Angry
- The Horse and His Boy

10. Number these titles in alphabetical order as they appear in our card catalog.

- Is There Life on a Plastic Planet?
- Dr. Doom: Superstar
- Deathwatch
- Look-it-up Book of Stars and Planets
- Look! Look!

11. Number these titles in alphabetical order as they appear in our card catalog.

- Monster is Coming
- Monster in the Third Dresser Drawer
- Monster Manners
- Monster Mania
- Monsters, Mysteries, and UFOs
- Monster Trucks and Other Giant Machines on Wheels
- Monster Birthday Party
- Monster & the Tailor
- Monsters from the Movies
- Mountains Around the World
- Monster's Nose Was Cold
12. Alphabetizing authors.

Does “Fleischman, P.R.” come before or after “Fleischman, Charles” in our card catalog?  

____ before  

____ after  

Does “Flesch, Y.” come before or after “Fleischman, Charles” in our card catalog?  

____ before  

____ after  

Does “Fletcher, Jessica” come before or after “Fletcher, A. Sarah” in our card catalog?  

____ before  

____ after  

13. Number these names in alphabetical order as they appear in our card catalog.

____ Foster, Stephanie  

____ Fortune, J. J.  

____ Ford, Ford Madox  

____ Foster, Sally  

14. Number these subjects in alphabetical order as they appear in our card catalog.

____ Carpentry  

____ Carnivals  

____ Castles  

____ Cartoons  

15. Number these authors and titles in alphabetical order as they appear in our card catalog.

____ Frankenstein  

____ Frankel, Max  

____ Frank and Mary  

____ Fradin, Dennis
16. Number these authors and titles in alphabetical order as they appear in our card catalog.

   _____ Amos Fortune, Freeman
   _____ Freeman, Don
   _____ Free to Be You and Me
   _____ Fortune, Amos

17. Number these subjects in alphabetical order as they appear in our card catalog.

   _____ Foods—Manufacturing
   _____ Friends, Society of
   _____ Food—Social Customs
   _____ Friendship—Ethics
APPENDIX B
SEARCH ITEMS

TITLE
Who Will Be My Friend
The Poison Factory
Octopus Pie
The Best Bad Thing
The Curse of the Blue Figurine

AUTHOR
Fairman, Paul W.
Harder, Eleanor
Geibel, James
Chaconas, Doris J.

SUBJECT
Animals, Training of
Fire Stations
Seals (Animals)
Payton, Walter, 1954
Insects — Poetry
APPENDIX C
ONLINE CATALOG OBSERVATION RECORD

Name _____________________________________________________________

M _____  F _____

Grade _____

Search Card #1 _____  #2 _____  #3 _____

Date _____/_____/86

I. Identify the elements of the online catalog entry:

AUTHOR  _____ Immediate  _____ With Difficulty  _____ Unable

TITLE  _____ Immediate  _____ With Difficulty  _____ Unable

CALL NUMBER FOR DGPL COPY  _____ Immediate

_____ With Difficulty

_____ Unable

IS THIS A BOOK DGPL OWNS? HOW DO YOU KNOW?

_____ Immediate

_____ With Difficulty

_____ Unable

II. Search Card #1 _____

1) DIFFERENTIATES AUTHOR-TITLE-SUBJECT

_____ Yes

_____ No

_____ Correct 2nd Time

_____ Unable

2) LOCATES CORRECT ENTRY  _____ Yes

_____ No
3) CALL # GIVEN

UNABLE TO LOCATE CALL # ___

GIVES CLASS # ___

4) NUMBER OF TOUCHES ___

5) NUMBER OF TIMES STARTS SEARCH OVER AT BEGINNING ___

6) TIME OF COMPLETE SEARCH ___

SEARCH INCOMPLETE ___

Comments:
APPENDIX D
CARD CATALOG OBSERVATION RECORD

Name ____________________________

M ____  F ____

Grade _____

Search Card #1 _____  #2 _____  #3 _____

Date ____________/86

I. Identify the elements of the online catalog entry:

AUTHOR  _____ Immediate  _____ With Difficulty  _____ Unable

TITLE  _____ Immediate  _____ With Difficulty  _____ Unable

CALL NUMBER  _____ Immediate  _____ With Difficulty  _____ Unable

II. Search Card #1 ____________

1) DIFFERENTIATES AUTHOR-TITLE & SUBJECT

   _____ Immediate

   _____ Begins on wrong side:corrects

   _____ Unable

2) CHOOSES CORRECT DRAWER

   _____ Immediate

   _____ Near miss on locating correct drawer

   _____ Number of incorrect attempts

   _____ Random attempts to locate drawer

   _____ Unable to locate

3) CHOOSES CORRECT CARD

   _____ Locates correct card

   _____ Uses guide, efficient search

   _____ Appears to use guides occasionally
Card by card
Flips randomly through drawer
Unable

4) CALL NUMBER GIVEN

Comments:
REFERENCES


