Side-by-Side: Users React to a Second Online Public Access Catalog

MEG SCHARF AND JEANNETTE WARD

In the spring term of 1987, the University of Central Florida (UCF) Libraries staff was faced with developing an ongoing instruction program for using a second online public access catalog. At this point UCF was in transition from CLSI, which had served as a catalog and circulation system to NOTIS's public access catalog, LUIS. In this phase of the library's transition, the users found two clusters of different catalog terminals, side-by-side, near the building's entrance and no card catalog. LUIS was to be the library's catalog while CLSI was to remain the library's circulation system. The CLSI system, in use since 1982, featured remote access and traditional access points (author, title, subject) to bibliographic records. LUIS could be considered UCF's second generation catalog (Hildreth, 1987), since it featured authority files and access to holdings of eight other university libraries, in addition to traditional catalog records and access. Presently (Summer 1988), the number of LUIS terminals available to the public has increased. The number of CLSI terminals has been reduced, relocated to a less visible area, and labeled as "circulation information." The transition to the NOTIS circulation module is being studied, but no definite date for implementation has been determined.

The University of Central Florida, Orlando, is one of nine universities in the Florida State University System (SUS). The first classes began in October 1968 with an original enrollment of 1,948 students. Current enrollment is 17,284 with 627 faculty offering over 150 degrees.

Automation History

The library was using automation to process books prior to its
opening in 1968. All cataloging information was entered on a Flexowriter, which produced reels of punched paper tape. The University Computer Center produced complete catalog card sets from these tapes. The Flexowriter data were also used to develop a database for the circulation system. When library materials began circulating in 1968, an Addressograph system was used. Plastic "credit cards" with each item carried the item's accession number. The student's identification card along with the item card were put through the circulation equipment which imprinted the information onto paper. These circulation slips were taken to the computer center daily where keypunch operators produced punched cards which were batch processed. The computer center generated complete, ready-to-mail overdue notices, fines information, and book bills using these three components: (1) bibliographic information from the library's Flexowriter; (2) circulation information, including the borrower's Social Security number and the accession number from the computer center's keypunch operation; and (3) the university's records which included Social Security number, name, and address of the borrower.

In 1972 the university upgraded from a Harris computer system to a large IBM computer. Library personnel went through the first of many conversion projects. Plastic cards required for the Addressograph machine were replaced by 80 column keypunch cards that included title and accession number. This included removing the card and pocket from every book and replacing it with a larger pocket and keypunch card. These new keypunch cards were generated from the database that was still being produced from the Flexowriter.

A library staff member recalls, "the first time we were sent to the stacks, it was fun. It was a release from regular work, like a school holiday. We worked in teams and each person seemed to take the work personally. People worked long hours cheerfully." Library staff dealt with the typical problems in any conversion project—e.g., cards for which no books could be found and books for which no cards had been produced. The collection at this time was 90,000 items. The advantage to this conversion was that keypunch cards were produced at the circulation desk at the time of checkout. Computer center staff no longer had to keypunch the information from printed slips produced by the Addressograph equipment. The circulation reports were still batch processed daily and notices and bills were processed weekly.

In 1974 the University Computer Center switched from keypunch to magnetic tape for processing which once again required the entire collection (over 150,000 items) to be recarded. Veterans of the first conversion project found this second effort to be "more regimented, more formal, less fun."

In 1976 the library joined SOLINET and began producing catalog card sets on the OCLC system. The archival tapes from the OCLC system could not be read into the library's circulation system by the
computer center. Therefore complete catalog information continued to be entered into the Flexowriter to produce the circulation database.

Between 1977 and 1979 UCF established a CLSI circulation system. During the negotiations and implementation a complete retrospective conversion of all bibliographic information into OCLC was completed. At this time the computer center still could not read the OCLC tapes into either the old circulation system or into the CLSI circulation system. By 1979 the computer center was able to use the information from the old circulation system to create the CLSI database and produce bar codes for 230,000 items. Library staff for the third time were sent to the stacks to physically "convert" every item by bar coding it. Although some still felt, "reconversion was an adventure, a break from regular work," many now had the attitude that, "it was an intrusion on the important ongoing work of the library professionals." At least one staff member felt strongly enough to request that the director "hire temporaries for every move and conversion project." However, most remember the prevailing attitude toward the moves and conversions as, "just doing what had to be done."

In 1980 CLSI circulation was implemented. Circulation information was now available online and public terminals were available to provide circulation information and supplement the card catalog. By 1981 the library was cataloging on OCLC with an immediate interface to CLSI and stopped filing cards in the public catalog. By 1983 the entire card catalog was physically removed and twenty-four CLSI terminals were available for public and technical use. In addition, annually produced microfiche (COMcat) of the catalog by author, title, and subject were available, as well as remote dial access.

By 1984 the library had upgraded its CLSI hardware twice and was negotiating for a major hardware expansion and software enhancements. In fifteen years the library had grown to over 250,000 volumes and survived three major conversion projects as well as several complete physical moves. The staff had developed an ongoing catalog instruction program that included printed materials, online help screens, a catalog assistance desk, and demonstrations.

And Then Came Luis

For the fiscal year 1984/85, the Board of Regents requested, and the Florida State Legislature approved, a proposal to automate the catalogs at all nine SUS Libraries:
Florida A&M University, Tallahassee
Florida Atlantic University, Boca Raton
Florida International University, Miami
Florida State University, Tallahassee
University of Central Florida, Orlando
University of Florida, Gainesville
University of North Florida, Jacksonville
University of South Florida, Tampa
University of West Florida, Pensacola

The proposal specified and appropriated the funds to create a Florida Center for Library Automation (FCLA) whose primary mission and scope should be to automate state university libraries (Florida Postsecondary Education Planning Commission, 1988, p. iv). To carry out this mission, FCLA was to implement NOTIS software as an online catalog at all SUS libraries.

Working closely with FCLA staff, each university library developed the specifications and methods of loading their catalog information into the MARC-based NOTIS system. The NOTIS system is located at the North East Regional Data Center (NERDC) on the University of Florida, Gainesville, campus. All users are connected by telecommunications to this single system. This is not a union catalog, as each institution has a separate section of the database; but access procedures and help information are uniform. Moving between the nine universities' library catalogs is quite easy.

The technical problems of taking UCF's catalog information, partly from OCLC MARC records and partly from CLSI titleform (non-MARC), were solved and the database was loaded and library staff trained in NOTIS by May 1986.

The library began a "phased rollout" of the new catalog during summer 1986. NOTIS terminals were installed at the reference desk where the public could use them and be instructed or assisted if necessary. The terminals were also installed in the Library Instruction classroom where students and other groups were given demonstrations. At this point the staff was concerned with user reaction to LUIS and expected a modicum of the same resistance that had accompanied the initial use of COMcat and CLSI in previous years, but the initial response of this small group of LUIS users changed librarians' expectations. Now the concern was that the overall response would not be resistance but confusion, or, even worse, apathy. Several questions and comments were repeated by the slowly growing numbers who had seen LUIS demonstrated: "So why are you bothering to replace CLSI?" and "Does this contain abstracts or index entries for journal articles?" and "So this is just like the other catalog." These comments led us to believe that user expectations were high for a new system, and that the presence of new terminals led users to expect that the new catalog would perform very differently from the old catalog. Coincidentally, a suggestion box was made available to the public at this time. The box is prominently displayed with a large bulletin board for the library's responses at the library's only exit. During the public introduction of LUIS, not a single question or comment appeared in the box about LUIS, CLSI, or the side-by-side catalog arrangement.

Because NOTIS implementation was a statewide effort, UCF was asked to participate in a statewide publicity effort. The target date for
statewide introduction was set for the week of September 15, 1986. The total system had 3,426,214 records; UCF had 266,478 (Florida Center for Library Automation Technical Bulletin, 1986, p. 3). Some libraries were developing high-profile publicity campaigns intended to generate high public awareness of this new development. These libraries had card catalogs and wanted to introduce an online public access catalog (OPAC).

Librarians’ experience at UCF with LUIS users on a limited basis brought us to the realization that we could not conduct a high-profile publicity campaign. Unlike schools introducing the first automated catalog, UCF could not generate awareness without heightening expectations. A unique position as a library initiating a second online catalog meant that our part of the statewide publicity campaign would be problematic—our goals needed to be different than those of libraries instituting their first online catalog.

Goals in publicizing LUIS at UCF were:
1. To induce trial and acceptance of LUIS by students, faculty, and staff at UCF while minimizing confusion over the existence of two online catalogs in the library.
2. To generate awareness on campus and in the community of the legislature's role in establishing the Florida NOTIS statewide system.
3. To update the local legislative delegation on the progress of SUS library automation.
4. To reinforce awareness of the UCF library and the resources and services that complement LUIS.
5. To support, with SUS colleagues, the systemwide publicity campaign for LUIS.

So instead of balloons, banners, T-shirts, wine and cheese parties, and other publicity activities used by some SUS libraries, UCF used a four-page campus newspaper insert as the chief publicity tool. In keeping with the goal of reinforcing awareness of the library, the insert featured campus “celebrities”—faculty, staff, and students—using LUIS to obtain library materials. When the twenty campus figures came to the library to have photos taken and to use LUIS, many of them commented that they were accustomed to hearing: “So why are you getting rid of the old catalog?” and “Doesn’t this one have magazine articles?”

In addition to the newspaper insert, the library LUIS instruction program had signs made to clearly identify LUIS and CLSI, had developed collateral material explaining the use of both systems available at service desks and terminal locations, displayed a modified version of our ALA poster session called “The Future is Now” (Linsley et al., 1986, p. 19) which explained the transition of the catalog, added LUIS instruction to the library instruction classes, and increased staffing at the reference desk.
Prior to the public introduction of LUIS, some library staff had started planning research projects to determine how best to introduce a second OPAC and what problems users would have with two online catalogs during the transition. However, lack of time caused by the NOTIS implementation schedule being controlled by forces outside the library prevented in-depth research in this area. Based on past experience with both staffing a catalog assistance desk and giving online catalog demonstrations, it was decided not to offer these services.

Catalog demonstrations were given at the beginning of the semester. Librarians were stationed in the library instruction room where students could come, individually or in groups, for a personalized demonstration. Despite heavy publicity, attendance was minimal (see Table 1). Catalog assistants were stationed next to the main cluster of catalog terminals and, as numbers of questions declined, began to approach students who appeared puzzled.

Students—and statistics—had indicated for a long time that there was "nothing to it" when using the OPAC and those with problems turned to the collateral material or the reference desk staff even when catalog assistance was available. An ongoing publicity and instruction program was considered important since the CLSI system had to stay because it would still be used as the library's circulation and reserve system.

Although information outside of the library's previous experience could not be gathered before the LUIS introduction, research into what problems two OPACs caused and how best to provide user instruction was now considered. Since the library had no budget to conduct research, the Marketing Department chair in the College of Business, Alvin C. Burns, agreed to help. During the spring term 1987, library staff worked with the Marketing Department and developed a user survey with the library objectives of: (1) determining how users learned the LUIS and CLSI systems, (2) determining user satisfaction with both systems—especially LUIS, (3) determining the extent of difficulty users had in identifying and understanding the differences between the two systems.

The survey instrument combined the library's needs with other goals of the marketing research class. The methodology and student-designed survey were directed by Marketing Department faculty.

The survey, coordinated by graduate assistant David Fields and Alvin Burns, was conducted by a Marketing Research 3613 class during two weeks in May 1987. At that time seven CLSI terminals were next to seven LUIS terminals located on the entrance floor of the library near the reference desk. Each group of terminals was identified by large overhead signs and individual signs on each terminal as well as the appropriate collateral materials.

Systematic sampling was used to select survey respondents from those entering the UCF Library. Student administrators were stationed
at the door to the library and approached every third person entering. The student administrator first qualified the respondent with two questions: Have you used one of the computerized catalog systems here in the library in the last six months? Would you be willing to take about five minutes and fill out a questionnaire? A negative answer to either question meant that the selected person was thanked and not given a survey. Those answering positively were given a survey. The software only analyzed the questionnaires of those who answered all thirty questions—i.e., those who were familiar with both CLSI and LUIS. Of 200 catalog users surveyed, 125 knew about the existence of two different catalogs and had used both.

**FINDINGS**

The typical student respondent was identified as: male (63 percent), Business Administration (45 percent) or Arts & Sciences (30 percent), Senior (47 percent), full-time student (88 percent), in sixth consecutive semester on the UCF—Orlando Campus and currently enrolled in a class requiring library research (58 percent), and had used both online catalogs.

We wanted to know how students were learning to use and distinguish the side-by-side catalog systems. Table 2 shows an area which surprised us. It shows that 76 percent of the respondents used printed material to learn CLSI while 38 percent learned about LUIS the same way. We were not surprised at the numbers for CLSI. In fact, a printed CLSI flip-chart, which the reference department had prepared and extensively distributed, had proved extremely popular. We were surprised because one of the strengths of the new system, LUIS, was the ease of learning it from help screens, yet over one-third of the users relied on the printed material. In fact, prior to the implementation of LUIS, the FCLA Public Services Committee surveyed forty-two libraries using LUIS and found that only four had prepared printed instructions for users. Since some SUS librarians indicated a need for the printed instructions, FCLA wrote, printed, and distributed them. Before the
survey, we had been sure that the LUIS help screens would ensure nonuse of the printed LUIS material by all but remote-access patrons. We can now speculate that the necessity of independent learning of the CLSI system from a printed chart conditioned patrons to check for printed instructions at the terminal. Or we can agree with the conclusion of research on OPAC instruction at Northwestern, that while librarians may think a system is user-friendly, not every system will be friendly to every patron (Nielsen & Baker, 1987).

When we asked students to compare the relative ease of learning each system, respondents indicated that the new LUIS system was easier to learn than CLSI. Since increased user-friendliness was one of the features we were happy about with LUIS, the results were not surprising (see Table 3). A vast majority of the respondents (90 percent) indicated that LUIS was either "easy to learn" or "very easy to learn" compared with 74 percent feeling the same way about the ease of learning the CLSI system. Actually, the only surprise with this finding was that 10 percent of the respondents found LUIS "difficult" or "very difficult" to learn to use. We can only surmise that these results might be a vestige of resistance to OPACs, but since the library has not had any card catalog as an alternative since 1983, that would be hard to substantiate.

Respondents were asked to rate the ease of using both systems. Figures for ease of use roughly equaled those for the ease of learning both systems. While 90 percent of the respondents felt that LUIS was easy to learn, 88 percent felt it was easy to use. CLSI was found easy to learn by 74 percent compared to 61 percent who felt it was easy to use. This mirroring of the ease of learning statistics validates respondents' perception of LUIS as the more user-friendly of the two systems.

In spite of the fact that the respondents felt that LUIS was easier to use and learn than CLSI, the average numbers of uses of each system by respondents were very close. Students were asked how many times during the summer semester they had used each system. The average number of times CLSI was used was 12.4 and LUIS, 14.7. The physical arrangement of the two systems contributes to the similar numbers of uses. The main banks of terminals for both systems are side-by-side, and, despite signage, the terminals look similar. The type of information gained from both catalogs is approximately the same, and the difference in the two systems was not perceived as great enough for respondents to walk from one terminal to another, or to purposefully seek out one system over the other on a regular basis. As long as both give bibliographic information and item locations, the facts that LUIS is more user-friendly and CLSI contains current circulation status were not perceived as important enough to outweigh convenience. Differences in the two catalogs were not enough to make the respondents move from whichever terminal was at hand.

Although there were similar numbers of uses of both systems, satisfaction with LUIS was significantly higher than for CLSI (see
Table 2
Comparison of How Students Learned to Use Each System

<table>
<thead>
<tr>
<th>Response Category</th>
<th>CLSI Number</th>
<th>CLSI Percentage</th>
<th>LUIS Number</th>
<th>LUIS Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed instructions near the terminal</td>
<td>95</td>
<td>76</td>
<td>48</td>
<td>88</td>
</tr>
<tr>
<td>Library class</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Library staff assistance</td>
<td>7</td>
<td>6</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Fellow student(s) helped</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>On-screen help and instructions</td>
<td>12</td>
<td>9</td>
<td>56</td>
<td>45</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>125</td>
<td>100</td>
<td>125</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3
Comparison of Ease of Learning Each System

<table>
<thead>
<tr>
<th>Response Category</th>
<th>CLSI Number</th>
<th>CLSI Percentage</th>
<th>LUIS Number</th>
<th>LUIS Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very difficult to learn</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Difficult to learn</td>
<td>30</td>
<td>24</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Easy to learn</td>
<td>70</td>
<td>56</td>
<td>58</td>
<td>46</td>
</tr>
<tr>
<td>Very easy to learn</td>
<td>22</td>
<td>18</td>
<td>55</td>
<td>44</td>
</tr>
<tr>
<td>Totals</td>
<td>125</td>
<td>100</td>
<td>125</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4. LUIS was found to be “satisfactory” or “very satisfactory” by 79 percent while 52 percent felt the same way about CLSI. More telling was the difference in the level of dissatisfaction. LUIS was found to be “unsatisfactory” or “very unsatisfactory” by 12 percent while 30 percent felt dissatisfaction with CLSI. While it could be inferred that some of these respondents may not be satisfied with any existing online catalog, the difference in the level of user satisfaction between the systems is significant. Level of satisfaction echoes the response on the questions of ease of learning and ease of use. LUIS is perceived as easier to learn and use. Therefore, users are more satisfied with LUIS although they are not sufficiently dissatisfied with CLSI to stop using the CLSI system.

We were naturally interested in the confusion caused by having two side-by-side online catalogs. Although student researchers were asked to try to determine a level of confusion, it must be remembered that the respondents were a fairly knowledgeable group of online catalog users—i.e., students who stated they are users of both catalogs. Table 5 shows that 49 percent did not agree with the statement that having two separate online catalog systems is confusing. About one-third (34 percent) of the respondents felt, however, that the existence of two systems in the library was confusing.
Respondent reaction to means of learning a computerized catalog was a category of great interest to us (see Table 6). Printed instructions were found by 57 percent to be a good way to learn, as shown in Table 2, yet 76 percent had learned to use CLSI and 38 percent had learned to use LUIS from printed instructions. Online menus and instruction were felt to be a good method of learning by 75 percent but only 9 percent had used this means of learning CLSI and 45 percent had learned LUIS from online help. Library demonstrations were considered good by 76 percent, yet the library had not offered routine demonstrations on LUIS based on previous low attendance at the CLSI demonstrations. A catalog lesson as part of a required library class was considered by 85 percent to be a good way of learning, yet only 3 percent had learned CLSI in a class and 2 percent had learned LUIS that way.

CONCLUSIONS

Although UCF is a relatively new institution with a history of relentless change and genuine commitment to automation, the staff was greatly concerned about the change from one online catalog system to another. From the point of view of the library staff, the changes were sweeping in scope. However, the survey showed that a sample of the more knowledgeable library users saw a less dramatic change. They found the new LUIS system easier to learn, easier to use, and more satisfactory than the old CLSI system but continued to use CLSI. Many indicated that they found the idea of two side-by-side systems confusing but many more did not. And, although most prefer to learn about online catalogs through printed materials or help screens, some thought that
Table 6: REACTIONS TO VARIOUS MEANS OF LEARNING A COMPUTER CATALOG SYSTEM

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online help menus and instructions are a good way for new student to learn a computer catalog system</td>
<td>4%</td>
<td>8%</td>
<td>13%</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>Printed instructions are a good way for new student to learn a computer catalog system</td>
<td>8%</td>
<td>15%</td>
<td>20%</td>
<td>44%</td>
<td>13%</td>
</tr>
<tr>
<td>Special class sessions are a good way for new students to learn a computer catalog system</td>
<td>2%</td>
<td>5%</td>
<td>8%</td>
<td>47%</td>
<td>38%</td>
</tr>
<tr>
<td>Library demonstrations are a good way for new students to learn a computer catalog system</td>
<td>2%</td>
<td>10%</td>
<td>12%</td>
<td>56%</td>
<td>20%</td>
</tr>
</tbody>
</table>

classes would be a good idea. It was more difficult to assess any confusion between the two systems on the part of users since only results from those who use both systems could be tabulated, but a majority of those surveyed were aware of the two systems and the differences between the two.

It must be recognized that the direction for automation adopted at any one time by an individual library may reflect a particular set of circumstances in that university or community which make a specific choice or decision uniquely valid. For that reason it is important to understand the environment that existed at the time the direction was established and to place the library and its decisions in that context. (Beckman, 1987, p. 527)

The decision to move to a second automated catalog was not made at the University of Central Florida campus and was implemented in an atmosphere filled with political and economic concerns. The implementation of the LUIS system differed from that of other participating institutions in Florida because of an awareness of the environment and user expectations. In the best of all possible worlds, we would have had time and resources for more extensive research and planning prior to the implementation of LUIS. In fact, when the decision was made to implement LUIS, plans were begun for a study to help decide the best method of introduction for a second automated system. But time constraints and political concerns dictated that the system be introduced to the public by a specified date, and system and physical constraints dictated the necessity of the side-by-side arrangement of the main terminal banks. With few economic resources available, the generous help of the Marketing Department in the College of Business enabled us to gauge the response of some of the more knowledgeable users to the two
catalogs. Given this particular set of circumstances, which resulted in the side-by-side use of two online catalogs at UCF, the survey results indicated that UCF users readily adapted to overlapping library technology.

REFERENCES


