3-23-1990

"Linus is Resting": The Joys and Perils of a Shared Automation Project at Henderson State and Ouachita Baptist Universities

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DRAFT 3/23/1990

"LINUS IS RESTING": THE JOYS AND PERILS OF A SHARED AUTOMATION PROJECT AT HENDERSON STATE AND OUACHITA BAPTIST UNIVERSITIES

THE VIEW ACROSS THE RAVINE: THE JOYS...UNIVERSITIES

THE JOINT AUTOMATION PROJECT OF THE LIBRARIES OF HENDERSON STATE UNIVERSITY AND OUACHITA BAPTIST UNIVERSITY

Automating a library is challenging, frustrating and rewarding. It requires detailed, often tedious planning, and enormous amounts of patience. Software glitches, hardware failures, and miscommunication between automation vendors and library staff are common complaints found in the library literature. These problems loom large when any library automates. When two libraries undertake such a project together, problems proliferate. The automation project of Ouachita Baptist University (OBU) and Henderson State University (HSU) Libraries illustrates problems inherent in any automation, some unique to joint endeavors, and others representative of cooperation between a public and a private institution. Above all, it illustrates how a positive approach to these problems can result in a system which increases the benefits to library users far beyond the walls of their own library.

The Joint Educational Consortium (JEC) of Arkadelphia was begun over a decade ago by cross-town rivals Ouachita Baptist and Henderson State Universities. The two schools, after almost a century of rivalry, approached cooperation with misgivings. From such small beginnings as a joint academic calendar and joint homecoming, cooperation through the Consortium enlarged to include a concert and a lecture series, and an annual state-wide art competition and exhibit as enrichment programs which neither school could undertake alone.

The other face of cooperation involved academic programs. Students were allowed to cross-register for courses, and some departments engaged in joint programs, even offering majors between the two schools. The universities found themselves cooperating to avoid duplication of

effort, especially where such duplication wasted precious resources. The libraries on the two campuses provided natural foci for cooperative efforts. The state school, which had been Methodist until about a generation earlier, and the smaller Baptist institution had librarians whose philosophy involved a high standard of service and cooperative efforts with other libraries. Putting aside any rivalries, the cooperative spirit found a ready audience among the librarians.

As their first major cooperative effort, the universities implemented a union catalog and established borrowing privileges for students at both libraries. Once those steps had been taken, students on each campus could discover the resources available in both libraries, and avail themselves of those resources wherever they might be housed.

In December, 1984, the two library Directors (Drs. Gary Warren and Ray Granade) met with JEC Director Dr. Dolphus Whitten to discuss how academic programs at the two schools could best be promoted through joint effort. In a discussion predicated on Whitten's belief that a major project focused on the libraries would be best, the discussants considered the relative merits of materials and access. From that meeting came the idea of an integrated library system.

Having agreed on the project's focus, the three embarked on a program of educating decision-makers. To that end, representatives of three automation companies journeyed to Arkadelphia to demonstrate the application of modern technology to library services. Faculty members and administration representatives met with local and visiting librarians for the presentations. By the end of the demonstrations, the educational program had succeeded. Discussions among faculty members on the respective Library Committees had reached consensus that improved access, as offered in the demonstrations, was more important than the additional materials which the funds earmarked to such a project could buy. Administrators had been convinced that the project would have broad faculty support, and offered the two schools "bragging rights" as the state's first library automation project.

In 1985, the JEC commissioned a study by a pair of library consultants, charging them with the task of examining current activities and recommending further cooperative ventures. Their final report included the recommendation for an integrated library system which could

involve not only the two universities, but Arkadelphia's public and public school libraries as well. The consultants envisioned a progression which would spread through the city to the county, and then outward in expanding ripples, until the two university libraries were the nucleus for a computerized network of libraries in southwest Arkansas.

The JEC tentatively approved the recommended plan and engaged the services of an automation consultant, Mr. Bob Walton. During the following year, he directed the library staffs in planning for an automated system. First came a series of preliminary, but not especially difficult decisions. What functions should be automated--all, or some (and if some, which ones)? The librarians agreed that a truly integrated system which automated all library functions should be the goal. Should the project be cobbled together, buying software from one company and hardware from another, or should it be a turnkey one? The librarians quickly agreed on the turnkey approach.

Then came the hard part. Designing a system which met the needs of both libraries required numerous accommodations. In the planning phase, the librarians learned new connotations for the words `cooperation' and `compromise.' The first test of their spirit of cooperation came with the "Functional Systems Requirement Report," a detailed, prioritized listing of exactly what each subsystem (cataloging, reference, online catalog, interlibrary loans, circulation, serials, and acquisitions) should do. This was a formidable task, since the document contained 365 pages of options to consider.

Two committees were formed, one for technical and another for public services subsystems. The professionals from each library represented their respective departments on the appropriate committee, with the Directors as the only common representatives on both. Each library provided one committee chair. Disagreements were solved by acceding to the library wishing to assign the higher priority. If, for example, HSU library assigned a "b" priority to the option of allowing patrons to place a purchase request in the system, and OBU assigned an "a," the "a" priority prevailed.

A second challenge to cooperation came with the "Vendor Proposal Evaluation Scoring Priority Worksheet," which was designed to direct the consultant in evaluating proposals. The consultant provided the librarians

with thirteen criteria which were to be ranked using coefficient values to indicate which were most important to the librarians in choosing a system. The criteria were

1. Vendor adherence to RFP preparation requirements.
2. Confidence in vendor organization, fiscal stability and management capabilities.
3. Vendor library automation experience.
4. Functional capabilities.
5. Configurations.
6. Costs.
7. Training.
8. Documentation.
9. Long term system expansion capability.
10. Contractual issues, documentation, and costs.
11. Implementation plan.
12. Performance examinations.
13. Data conversion plan.

Two criteria tied for first place: confidence in vendor organization, fiscal stability and management capabilities, and vendor library automation experience. The consultant advised that neither criterion should be in first place. He suggested, from his own experience, that vendor adherence to the Request for Proposal (RFP) preparation requirements should be the number one criterion. He reasoned that if a vendor could not comply with initial requirements, the libraries probably did not wish to deal with that vendor. The librarians followed his advice and placed their two choices in positions two and three.

Midway through the planning process, the consultant asked the staffs to rank the subsystems requested as part of the automated system. Which subsystems were considered essential and which would be useful, but optional? There was little difference of opinion on this matter. Although the two libraries ranked the subsystems in different orders, both gave circulation top priority, and the online catalog and bibliographic catalog maintenance subsystems made the top three of each list. Both libraries also placed the multiple institution resource sharing subsystem near the end of their lists. When the consultant patiently explained that this subsystem was the basis of the joint system, it was immediately moved to the top of

the lists!

This example points up an important and continuing problem--lack of knowledge on the librarians' part, and inadequate prior explanation on the consultant's. It is a classic case of "if I had known then what I know now,...." Wide-ranging reading on the staffs' part could not prepare them for what lay ahead; the comparative novelty of the technology's application assured a gap in the descriptive literature. Installations had not proceeded at a rate which would allow guiding experiences to be published widely enough for staff self-education. Being first to market offers great potential for innovators, but offers great potential for disaster as well, for many well-meant decisions have unforeseen adverse results.

One of the most important and difficult compromises came at the end of the planning period. Four vendors (OCLC, Data Research Associates, CLSI and Carlyle), of the seven who had bid, were invited to Arkadelphia to demonstrate their wares. Each library staff then met separately and rated the four vendors in three categories: hardware, software, and overall. The contest immediately narrowed to two finalists--DRA and CLSI. Both libraries ranked DRA first on hardware and CLSI first on software. In the overall rating, OBU placed DRA first and CLSI second; HSU placed CLSI first and DRA second. Since the two staffs had independently agreed on their top two choices, there seemed little chance, or need, to compromise on a third vendor.

Lengthy discussion ensued on the issue of hardware versus software. Of the four vendors, CLSI was the only one which could immediately provide software for all the subsystems required by the libraries. However, the CLSI hardware was not state-of-the-art. DRA, on the other hand, had state-of-the-art hardware, but their acquisitions and serials subsystems software was "in development." Deadlocked on the hardware-software issue, the libraries agreed to throw the question to Walton, with their rankings and evaluations. Upon his recommendation that software should outweigh hardware, the libraries finally agreed upon CLSI. The contract was finalized in July, 1987.

The system was to be financed by funding from both Universities and the Ross Foundation, a local philanthropic organization. Costs were divided between the two schools on a simple formula. Each institution paid for the individual pieces of equipment which it would use (terminals

and printers). The cost of items which the schools would share was apportioned on an approximation of use derived from each school's proportion of the total number of records in the combined database and of the total number of terminals (which proved identical).

The realities of a system shared between a public and private institution complicated some decisions. The project was to be a joint venture through the JEC, which would allow the two schools to cooperate without raising the ire of the state legislature or the Arkansas Baptist State Convention, and without raising the issue of church-state separation. Each library would have its terminals, but the mainframe's location posed a political problem. Each institution had a place for the mainframe; neither administration was really willing to allow the other control of that part of the system. The compromise housed the mainframe in the HSU administrative computer center and awarded the position of system coordinator to OBU's Data Processing Coordinator, Mr. Bill Allen. While politically expedient, this compromise hampered the project's development, since the system coordinator is not on-site when software and hardware problems occur, nor (despite being a quick study) has he the library background to understand some of the issues involved in the process. The consultant advised having a librarian familiar with automation as the system coordinator, and CLSI consistently reminded the schools that matters would progress more smoothly if they had a single person with whom to talk, but the librarians agreed with the JEC's rejection of that recommendation when the administrations posited that the project could not be undertaken if it entailed hiring additional personnel.

Even before contract signing, Henderson and Ouachita catalog librarians met with a CLSI consultant to make decisions regarding database preparation. Records in MARC format were available on OCLC archival tapes for use in the new system, since Ouachita and Henderson had been OCLC members since the mid-1970s and since retrospective conversion was over 95% complete at both libraries. In addition, placing a single order for the records through the JEC decreased costs for stripping and "deduping" somewhat.

Merging records from the two universities into a single database presented the first major obstacle in post-contract cooperation. Two problems emerged in this process. First, cataloging practices varied

between the two libraries. For example, Ouachita does not classify periodicals, Henderson does; Henderson stopped using accession numbers years ago, Ouachita still does. Second, a twenty-five to thirty-five percent overlap existed in the holdings of the two libraries, which necessitated a choice of which library's OCLC record to use.

Choosing from duplicate OCLC records was one of the first compromises in merging the databases. The catalogers at Henderson and Ouachita had only been at their posts since 1985 and 1986 respectively, and luckily were unaware of all the cataloging nuances that had preceded them onto the OCLC tapes. Everyone was aware, however, that Ouachita's previous cataloger had been at her post since 1961, while Henderson had employed a number of different catalogers during that period, and that Henderson had at one time employed a music librarian. This background and situation, coupled with the current catalogers' collegial working relationship, fostered quick decisions.

In resolving duplicate OCLC records, the catalogers decided to use Ouachita's record for monographs and keep intact their accession numbers in the 590 field. Henderson's serials records would preserve their classification numbers in the MARC record. Henderson's records for music scores, sound recordings, maps, and other media materials got the nod, since much of that work had been done by the music librarian and since Ouachita had cataloged fewer items in these formats. Finally, Ouachita's archival materials records were chosen, since Henderson had few items in this format.

In retrospect, this resolution of duplicate OCLC records into one database could have been a major stumbling block if either cataloger had insisted that his or her institution's cataloging was superior, or if one of the catalogers had been worried about minute cataloging details in the OCLC records. Fortunately, neither was the case. Common sense and cooperation prevailed. However, this area has great potential for causing major problems for multiple libraries sharing an automated system.

Circulation protocol was another major issue requiring compromise. From the beginning both libraries had insisted on maintaining their individual loan and fine structures, and had sought a system which would allow them to "cooperate separately." The CLSI circulation system allowed each library to establish an "agency" or "agencies" for different collections,

and to have a number of unique parameters for each library. Each library could determine its own loan periods, fine rates, and delinquency thresholds.

The libraries did have to agree on several system-wide circulation parameters, including the timing of any grace period before fines would begin to accrue and notices would be sent, and of the notices themselves.

Previously HSU Library effectively loaned for the entire semester, charged no fines and was quite lenient in its identification of overdue items; OBU Library loaned for two weeks, charged a daily fine, and vigorously pursued overdues. Even a relatively short grace period meant a relaxing of OBU's circulation policy but a sharp restriction of HSU's. Some of the HSU librarians expressed concern at an abrupt switch back to a more stringent circulation policy, while noting that the current policy might be too lenient. After much discussion, the grace period was set at two days--longer than the OBU preference but shorter than the four or five days preferred by the Henderson librarians.

The timing of notices was tied to having them printed. The CLSI system can print three overdues and one billing notice. The text of all notices must be system-wide, which requires wording "generic" enough for the libraries to share them. (See below).

INSERT SAMPLE FINE NOTICES

OBU used the first and third, HSU the second and billing notices. The first notice was to print after an item was overdue three days, the second after four, the third after seven, and the billing notice after eleven days. In order for the system to print a notice it must also print all previous ones, which means that many notices are printed unnecessarily (although HSU uses some to notify faculty of their overdues). In this area the libraries use more paper to ease the actual paperwork. Both libraries have gained greater control over overdues and fine notices, and bills are sent more quickly. Again, HSU librarians expressed concern that bills would be sent to patrons eleven days after a book became overdue, since with the manual checkout system, patrons could "slip through" for considerably longer. Yet, no adverse reactions from HSU patrons have been noticed as a result of this tightening of borrowing regulations.

Patron categories and circulation statistics presented additional

problems to be resolved. A list of OBU and HSU patron categories was devised to incorporate different borrowing privileges. HSU and OBU graduate and undergraduate students constituted one category, faculty and staff a second, and faculty and staff dependents a third. OBU requested a separate category for students' dependents, while HSU required a community category. Based on a mix of these categories and the types of materials being borrowed, each library had to extend or limit borrowing privileges in different categories. For example, previously each library's community cards were good at only that library; now they are accepted system-wide, though the number of community loans does not seem to have increased substantially (community patrons seem to have a library of preference as casual users). Also, books can be borrowed by inhabitants of either campus, but recordings are only available to respective faculties.

Circulation statistics likewise required consensus because of system limitations. Statistical categories to aggregate circulations (e.g., 200-209, 210-219, 220-229) had to be devised. Fortunately the system offered 240 of these categories, so while some categories overlap, each library has a few that are distinctly its own. Additionally, each library had to decide on an interval to compile circulation statistics: daily, weekly, or monthly. HSU had compiled statistics weekly, OBU daily. Because the system will not save previous compilations, the two libraries eventually agreed that monthly statistics would suffice.

In June, 1989, after two years of planning, working, and waiting, the circulation system was fully functional, and after testing came on line in August. The online public access catalog (OPAC) was the next module scheduled for implementation. In part because of the long wait, in part to drum up enthusiasm for a "grand opening," the JEC sponsored a contest, open to all faculty, staff and students on the two campuses (except librarians), to name what had come to be known as "the electronic link." A committee, composed of a librarian, faculty member, and student from each campus and chaired by the Director of the JEC, selected LINUS (Library Information University System).

With the name selected and system tested, the OPAC faced an early November unveiling. At this point, certain administrators raised a "major" issue: which university's name would go first on LINUS's welcome screen? Since the system's architecture utilized two "front-end" processors, each

library could have been allocated one processor, and the welcome screen tied to that processor could have been site-specific. Such an arrangement would have negated the redundancy inherent in the architecture and thus diminished the system's operational utility. The only other option was to change the welcome screen weekly, or at some other specified interval, and rotate the order of the names. The librarians solved the dilemma by placing the Joint Educational Consortium first on the screen, followed by the school names on a separate line. Surprisingly, this was done without any blood letting or name calling! As LINUS becomes more of a fixture at the two libraries, some adjustment in the welcome screen may be made. Happily, the cooperation that brought the system to fruition was stronger than the importance of the order of a few words.

The experience of the two universities illustrates that two libraries can implement an automated library system almost as easily as one, even when one is a private and the other a public institution. A rubric under which cooperation can be subsumed, like the JEC, is decidedly helpful. It allows two entities to act collectively in order to enjoy the economies of scale, and to avoid needless regulations upon one or the other. Having a Director who is simultaneously committed to the importance of libraries and willing to be helpful rather than attempting to run the project from a basis of ignorance makes a project of this sort possible. The decade of previous cooperation helped the project, but much credit goes to the library staffs whose commitment to the project overshadowed institutional loyalties and rivalries to allow this project to succeed with a minimum of rancor and dissension. The automation project provided an opportunity for both libraries to examine their policies and identify areas for improvement. It also led to the discovery of new ways to work together in order to better serve their patrons. Perhaps most importantly, it encouraged both libraries to seek creative and cooperative solutions to patron needs, such as the potential in a shuttle service for materials and in a combined technical services operation.