Research Notes

Inventory Costs: A Case Study

Clifford H. Haka and Nancy Ursery

Comprehensive inventories are seldom undertaken in large academic research libraries because it is believed that the benefits derived do not justify the costs incurred. Procedures and statistics for a manual inventory and an inventory coordinated with the conversion to an online circulation system at the University of Kansas main library are presented. Results of this two-phase inventory suggest that such a project can be cost-effective in a large library.

One of the most intimidating projects for a large library to consider undertaking is an inventory of its holdings. A review of the literature on inventories and responses to a questionnaire on inventory practices in academic research libraries indicate that the controversy over whether the benefits derived from an inventory justify the costs has changed little in the past twenty years. In principle, most librarians agree that an inventory is worthwhile; in practice, few actually commit their resources to one. Although an inventory project is not necessarily logical for every library, a comprehensive inventory recently completed at Watson Library, University of Kansas, suggests that commonly held estimates of the costs involved are extravagant and that the benefits are often understated.

The main collection at the University of Kansas includes materials cataloged under both the Dewey Decimal and the Library of Congress classification systems. The Dewey materials for the most part are those cataloged prior to 1970 and not subsequently reclassed into the currently employed Library of Congress system. For reasons that will become clear, the procedures used to inventory the two groups were significantly different.

The procedure used to inventory the Dewey portion of the main collection (approximately 417,690 volumes) involved taking a drawer from the shelflist to the stacks and reading the shelflist cards against the actual holdings. Holdings of periodicals were not inventoried, though the presence of the title was checked. Multiple copies of monographs were inventoried, however. In addition to the shelflist drawer, book flags and a book truck were taken to the stacks. The reading was efficiently and accurately performed by two nonprofessional staff members who alternated reading call numbers.

Two major discrepancies arose from this reading. The first was failure to find the book corresponding to the shelflist card. In that case, the shelflist card was turned up in the drawer and the reading continued. When the drawer was completed, call numbers of upturned cards were checked against the circulation record. If the book was checked out, the card was turned down. Upon completion of the circulation check, the cards still on edge were

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photocopied and the shelflist drawer returned to the catalog. The remainder of the inventory, which continued for six months, was done with the photocopies of the shelflist cards. To minimize inconvenience for other shelflist users, the shelflist drawer was usually removed from the catalog for only four or five hours.

Three searches were made for each missing book. If a book was located during the inventory period, the photocopy of the shelflist card was discarded. At the end of six months, if a book was still missing, both the shelflist and public catalog cards were pulled, and the photocopied cards were sent to the Acquisitions Department as lost-book notifications.

The second major discrepancy found in the inventory was a book on the shelf with no corresponding shelflist card. Books with no shelflist card were pulled and placed on the book truck. If the nature of the discrepancy could be identified immediately (mismarked, belonged in branch library, etc.), a colored flag was inserted in the book. Upon completion of the drawer, the public catalog was searched for cards for the unflagged books that had been placed on the truck. If cards were located in the public catalog, a shelflist card was prepared. If no cards were located, the book was sent to the Cataloging Department for possible reinstatement.

The inventory of the Dewey-classified materials produced the following results:

1. Items inventoried: 417,600
2. Items declared lost: 8,195 (1.96 percent)
3. Items requiring remarking: 3,540 (0.85 percent)
4. Items in the wrong library location: 402 (0.10 percent)
5. No shelflist or public catalog cards (sent for possible reinstatement): 1,595 (0.38 percent)
6. Wrong location on shelflist: 570 (0.14 percent)
7. No shelflist card: 456 (0.11 percent)

Items 6 and 7 represent noncritical errors; that is, library users should still have

TABLE 1
BREAKDOWN OF AVERAGE TIME SPENT PER DRAWER

	Nonlibrarian Staff Time (Hours)	Student Assistant Time (Hours)
Reading in the stacks	3.0	3.0
Processing cards with no books	—	1.5
Processing books with no cards	1.0	—
Checking public card catalog	—	0.5
Searching	—	1.0
Total	4.0	6.0

been able to go from the public catalog to the book on the shelf. Items 2 through 5 represent critical errors, for the library user would not have been aware that the library owned the book or would have been unable to locate the book on the shelf. Critical errors totaled 13,732 items, or 3.29 percent of the collection (figures for misshelved books are not included). Since regular shelf reading can correct misshelving, the authors are primarily concerned with reporting results obtained by the inventory process.

The time required to process a shelflist drawer was recorded for several drawers selected at random. The average time per drawer was ten hours, broken down as shown in table 1. This yields a "straight salary only" cost of $44.10 per shelflist drawer:

$$4.0 \text{ hours} \times \$6.00/\text{hour} = \$24.00$$
$$6.0 \text{ hours} \times \$3.35/\text{hour} = \underline{\$20.10}$$
$$\$44.10$$

The average shelflist drawer contained thirteen hundred cards, forty-three of which involved critical errors. The average cost per critical error corrected was $1.03.*

This figure is presented as an estimate of the basic cost incurred by the project at the University of Kansas; costs would undoubtedly vary in another setting.

The materials classified under the Library of Congress system are those re-

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*1,300 cards/drawer × 0.0329 critical errors/card = 43 critical errors/drawer ($44.10/43 = $1.03)

ceived after 1970 or reclassed from the Dewey collection since that time. With the introduction of a new online circulation system in the late 1970s, the LC-classified materials were retrospectively entered into the circulation database. It was approximately two years later that an inventory of the LC materials was undertaken. Instead of comparing the LC shelflist cards with the physical items on the shelf, the shelflist was read against the circulation database. The assumption was that if the item was in the database, it had been on the shelf within the last two years, and this was considered sufficient.

If a shelflist card existed for a book not in the circulation system database, a search was made for the book. If found, it was added to the database. If not found, it was eventually declared lost. If a book was in the database but there was no corresponding shelflist card, the book was retrieved from the stacks and the circulation database information verified. At that time either the database was corrected (if the book belonged in another location, etc.) or the public catalog was searched. If cards were located in the public catalog, a shelflist card was prepared. If no cards were located, the book was sent to the Cataloging Department for reinstatement.

The results of the Library of Congress inventory are as follows:

1. Items inventoried: 497,060
2. Items declared lost: 3,024
3. Items requiring remarking: 594
4. Items in the wrong library location: 3
5. No shelflist or public catalog cards (sent for possible reinstatement): 375
6. Wrong location on shelflist: 7
7. No shelflist card: 253

A summation of the critical errors for this part of the inventory yields a critical error rate of 0.8 percent. The time to process a thirteen-hundred-card shelflist drawer averaged two hours. All work was performed by nonlibrarian staff, thereby yielding a cost of $12 per drawer, or $1.15 per critical error.

One significant difference between the two inventories is that the Library of Congress procedure did nothing to put the books in correct call number order, although this can be done rather inexpen-

sively with student-assistant shelf reading. Also, it was impossible to add tasks to the LC procedures as was done with the Dewey procedure. For example, Dewey books found in poor condition were sent for repair and multiple copies were weeded according to rules provided by bibliographers. In all other important aspects, the two procedures worked similarly.

From this experience we conclude, first, that if a library is interested in reducing user frustration by eliminating the types of "critical errors" discussed above, it may be done at a price far lower than expected. Furthermore, if the shelflist is read against the stacks, they will correct "noncritical errors" along the way in addition to improving shelf order. Second, libraries involved in automating their circulation systems may profit from coordinating an inventory procedure with retrospective conversion projects that accompany the new circulation system.

In conclusion, the inventory conducted at the University of Kansas suggests that

inventories are neither unaffordable nor unmanageable and they produce a more than reasonable return for the effort expended. It might, therefore, be prudent for library managers to resist the urge to reject such a project out-of-hand simply because the holdings are large. In closing, a "catch-22" admonition may be in order: if a sample inventory at a library is confusing and expensive (slow), it probably indicates that a complete inventory is badly needed.

Purposes and Uses of Residence Hall Libraries

Gail Oltmanns and John H. Schuh

This paper describes a study of student use and perceptions of their residence hall libraries at Indiana University. A telephone survey of students in residence centers and a user survey conducted in the libraries were the two methods used to collect the data. The responses indicate that students do, in fact, use their residence hall libraries. Most frequently, they use the magazine and newspaper collections. Records and audiocassettes, class-related materials, and study space are also frequently cited as popular uses. Because there are other libraries on campus that serve the academic needs of students, it seems reasonable to develop residence hall library collections to fulfill the supplemental, leisure-reading needs of student residents.

Libraries have been developed in residence halls for a variety of reasons. Residence hall libraries enrich the educational experience of resident students, provide easy access for students who have reference questions, and serve the general library needs of students by making books, magazines, newspapers, records, and tapes available to students in the place where they live. Furthermore, residence center libraries may ease the demand for study space and materials in the main library.

The first residence hall libraries were started at Harvard in 1928 where a library was developed within each of seven houses. This system became the model for future residence hall library systems.

Soon after Harvard established its house libraries, B. Lamar Johnson established six dormitory libraries at Stephens College in Missouri. Yale created nine college libraries and a number of other colleges and universities developed residence hall library systems, although their scope and level of sophistication varied considerably. Some of these programs disappeared, however, due to lack of interest or financial support. Others grew stronger. Specific reasons that contributed to colleges and universities sustaining the viability of residence hall libraries included adequate funding for the purchase of current materials, adequate staff, and the security of materials in the libraries. The University of Michigan and Indiana University–Bloomington (IUB) currently operate the largest residence hall library systems with eleven in each system.

Although residence hall libraries have existed for more than fifty-five years, little has been published about them. Several articles appeared in the 1930s that discussed the Harvard system,[1] the Stephens College dormitory libraries,[2] and a dormitory library established at the University of Chicago.[3] Harvie Branscomb (1940) devoted a chapter of *Teaching with Books* to the discussion of residence halls libraries. He argued that books should be available to students in their residence centers because, "on a college campus, which exists for teaching purposes, books should be in

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