is an oversight that continued for two years and has only recently been realized. There may be other examples of this type, and they will be corrected as they are uncovered.

### CONCLUSION

The formula approach as it is applied here at UCLA can be adapted to other similar academic systems as well as to quite different operations, such as public library systems. It is a fairly simple and straightforward solution to the problem of dispersing funds, and it works well if it is viewed as a dynamic approach that can be changed or modified to accommodate new information or different tasks.

It is anticipated that the UCLA public services formula will undergo changes after the three-year initial period of its implementation; some of the areas that will be altered have already been mentioned. Down the road is a technical services personnel formula that will be developed after automation is fully established.

#### REFERENCE

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## CLIFFORD H. HAKA AND NANCY URSERY

# University Faculties and Library Lending Codes: A Survey and Analysis

The concept of holding patrons responsible for the return of books checked out from a collection is basic to libraries. The implementation of this principle is difficult in the case of borrowing privileges for university faculty members.

During the past two years the University of Kansas, Lawrence, has implemented a new lending code that provides for the assessment of penalties on faculty members. The code, although approved through university governance channels, has precipitated furious and continuing debate. Disgruntled faculty members opposed to the code have argued that such penalties are not imposed on their counterparts at other institutions. Believing this not to be the case but failing in an attempt to locate counterevidence, the circulation staff surveyed the ninety-eight members of the Association of Research Libraries that have faculties. The results of the survey are reported below.

In April 1980, the following questionnaire was sent to the ARL academic library members.

Clifford H. Haka is circulation librarian and Nancy Ursery is former circulation supervisor, University of Kansas Libraries, Lawrence. 1. Are faculty members subject to fines for overdue materials?

() Yes () No

2. Are other or additional measures employed to encourage return?

() Yes (If yes, please explain) () No

3. Are faculty members subject to fines for nonresponse to recall notices?

() Yes () No

4. Are other or additional measures employed to encourage response?

() Yes (If yes, please explain) () No

5. If fines are levied, are procedures available to ensure payment?

() Yes (If yes, please explain) () No

6. Are there other cases where penalties or restraints of any sort are levied against faculty?

() Yes (If yes, please explain) () No

Information from eight institutions that had not responded by August 1, 1980, was obtained via telephone, thereby completing the responses for all ninety-eight libraries.

Initial inspection of the completed questionnaires indicated a need for more precise definitions of what constituted positive and negative replies.

Questions 1 and 3—In many instances respondents indicated that a fine was levied for nonreturn of regularly circulating or recalled materials, but that the fine was canceled if the item was ever returned. A response was therefore counted as positive only if at some time an irrevocable charge was assessed. (In all cases in which the responses were not clear, follow-up telephone inquiries were made.)

Questions 2 and 4—These responses were broken down into the following two categories according to the action taken: (1) some punitive action such as restriction or suspension of borrowing privileges, or the assessment of a replacement book bill; and (2) no punitive action, but typically personal contacts or written reminders only.

Question 5—An affirmative response was scored to this question only if the institution could legally force payment of a penalty by such means as payroll deductions.

Question 6—Aside from one institution that has the power to levy \$25 discretionary fines "on any borrower whose abuse of his privileges is serious enough to warrant it," no additional significant procedures were revealed via this question.

Tabulation of the questionnaire responses provided the following data:

1. Do ARL libraries assess fines to faculty members for overdue materials?

Yes 41 No 57

2. Do the fifty-seven libraries that do not assess fines use other punitive measures to encourage return of overdue materials?

Yes 30 No 27

3. Can the forty-one libraries that assess overdue fines legally force payment?

Yes 19 No 22

4. Do ARL libraries assess fines to faculty members for nonresponse to recalls?

Yes 55 No 43

5. Do the forty-three libraries that do not assess recall fines use other punitive measures to encourage return of recalled materials?

Yes 19 No 24

6. Can the fifty-five libraries that assess recall fines legally force payment?

Yes 24 No 31

In an effort to provide some possible explanation of the division regarding fines, responses were correlated with several descriptive variables. It was first considered that there might be some correlation between library ranking and the assessment of penalties to faculty members. The independent variable was supplied by recoding responses of the institutions in three groups according to ratings in the ARL Library Index, 1978–79.<sup>1</sup> Libraries that use a combination of penalties were placed in the category representing the strongest penalty imposed. Findings are presented in table 1.

High- and low-ranking libraries are less likely to assess regular overdue fines than middle-ranking libraries; however, the assessment of fines for nonreturn of recalls is virtually identical among groups. In all cases, although less pronounced among the middle-ranking libraries, more libraries fine for nonresponse to recalls than for overdue materials. Among high-ranking libraries punitive measures are more often used to facilitate the return of recalled materials than for regular overdue materials, but in the middle- and low-ranking libraries the pattern is different. There are slight increases in the number of middle-ranking libraries that fine and that use no punitive measures for recalls, compared to measures used for overdue materials, with a corresponding decrease in use of punitive measures other than fines. The low-ranking libraries follow this pattern, although the increase in the number that levy fines for recalls compared to overdues is more substantial.

Although typically beyond the administrative control of library personnel, the ability to force payment, with measures such as payroll deduction, can be significant in the effectiveness of fines policies. As indicated in column one of table 1, few high-ranking libraries are provided legal means of forcing payment of recall or regular overdue fines. In sharp contrast, for both overdue and recalled materials, twelve of the middle-ranking libraries levy fines and have legal means to force payment. Approximately half of the low-ranking libraries that levy fines can force payment.

The correlations between library ranking and measures used to encourage the return of overdue or recalled materials provided some general patterns, but did not appear to define, with any great precision, those institutions that fine as compared to those that do not. Therefore, a second descriptive variable, geographic location, was investigated. United States libraries were grouped according to the four United States Census Bureau regions, with Canadian libraries forming a fifth group.<sup>2</sup> Responses of these subgroups are presented in table 2.

|   |                             |                      | TAB                                 | LE 1           |                             |                     |                                     |                |  |
|---|-----------------------------|----------------------|-------------------------------------|----------------|-----------------------------|---------------------|-------------------------------------|----------------|--|
| RESPONSES CORRELATED WITH LIBRARY RANKING |                             |                      |                                     |                |                             |                     |                                     |                |  |
| ARL<br>Library Index                      | Force Payment<br>(Yes / No) | Measures Use<br>Fine | d for Overdues<br>Other<br>Punitive | No<br>Punitive | Force Payment<br>(Yes / No) | Measures Us<br>Fine | ed for Recalls<br>Other<br>Punitive | No<br>Punitive |  |
| High libraries<br>1–33                    | 2 / 10                      | 12 (37%)             | 11 (33%)                            | 10 (30%)       | 3 / 15                      | 18 (55%)            | 11 (33%)                            | 4 (12%)        |  |
| Middle libraries<br>34–65                 | 12 / 5                      | 17 (53%)             | 8 (25%)                             | 7 (22%)        | 12 / 7                      | 19 (59%)            | 4 (13%)                             | 9 (28%)        |  |
| Low libraries<br>66–98                    | 5/7                         | 12 (37%)             | 11 (33%)                            | 10 (30%)       | 9 / 9                       | 18 (55%)            | 4 (12%)                             | 11 (33%)       |  |

 TABLE 2

 Responses Correlated with Geographic Region

| Region                 | Measures Used for Overdues |                    |                     |                          | Measures Used for Recalls |                     |                    |                     |  |
|------------------------|----------------------------|--------------------|---------------------|--------------------------|---------------------------|---------------------|--------------------|---------------------|--|
|                        | Force Payment<br>(Yes/No)  | Fine               | Other<br>Punitive   | No<br>Punitive           | Force Payment<br>(Yes/No) | Fine                | Other<br>Punitive  | No<br>Punitive      |  |
| West                   | 8/3                        | 11 (58%)           | 5 (26%)             | 3 (16%)                  | 12/4                      | 16 (84%)            | 2 (11%)            | 1 (5%)              |  |
| North Central<br>South | 5/3<br>3/5                 | 8 (36%)<br>8 (31%) | 10 (46%)<br>5 (19%) | 4 (18%)<br>13 (50%)      | 5/6<br>3/6                | 11 (50%)<br>9 (35%) | 8 (36%)<br>3 (11%) | 3 (14%)<br>14 (54%) |  |
| Northeast<br>Canada    | 2 / 5<br>1 / 6             | 7 (32%)<br>7 (78%) | 9 (41%)<br>1 (11%)  | ${6\ (27\%)\ 1\ (11\%)}$ | 3/8<br>1/7                | 11 (50%)<br>8 (89%) | 5 (23%)<br>1 (11%) | 6 (27%)<br>0        |  |

TABLE 3

RESPONSES CORRELATED WITH TYPE OF INSTITUTION

| Type of<br>Institution     | Measures Used for Overdues  |          |                   |                | Measures Used for Recalls   |          |                   |                |  |
|----------------------------|-----------------------------|----------|-------------------|----------------|-----------------------------|----------|-------------------|----------------|--|
|                            | Force Payment<br>(Yes / No) | Fine     | Other<br>Punitive | No<br>Punitive | Force Payment<br>(Yes / No) | Fine     | Other<br>Punitive | No<br>Punitive |  |
| Public,<br>state-supported | 16 / 16                     | 32 (48%) | 19 (29%)          | 15 (23%)       | 19 / 24                     | 43 (65%) | 10 (15%)          | 13 (20%)       |  |
| Private                    | 3/6                         | 9 (28%)  | 11 (34%)          | 12 (38%)       | 5/7                         | 12 (38%) | 9 (28%)           | 11 (34%)       |  |

A significantly greater percentage of Canadian libraries levy overdue fines than any United States group. Within the United States, the important distinction is between the West, where 58 percent of the libraries levy overdue fines, and the other regions, where only about one-third levy overdue fines. Four of the regions reflect a substantial increase in the percentage that levy recall fines compared to overdue fines. The South is the deviant case here, with only a 4 percent increase.

Among Canadian and western United States libraries there is a definite trend toward the use of punitive measures to facilitate the return of overdue materials. This pattern continues and is more pronounced for nonresponse to recalls. In the North Central and Northeast regions, the trend is toward the use of punitive measures other than fines for overdue materials, with a shift toward the use of fines for nonresponse to recalls. The South has a unique pattern. Half the libraries in this region use no punitive measures to facilitate the return of overdue materials. However, the majority of those that use punitive measures do levy fines. As table 2 indicates, there is a slight increase in both the percentage that use no punitive measures and the percentage that levy fines for recalls, compared to overdue materials.

The regions (four U.S. and Canada) can cleary be ranked according to the ability of libraries to legally force payment of overdue and recall fines. However, there is little similarity between this ranking and the regional patterns discussed above.

Although there do seem to be some regional trends in assessment of penalties to faculty members for overdue and recalled materials, the geographic breakdown does not provide a clear description of libraries that do and do not levy fines or use other punitive measures to facilitate the return of materials. The final attempt to describe the two groups was a breakdown according to the source of funding for the institutions at which the libraries are. located. Institutions were classified as public or state-supported and private. The results are displayed in table 3.

Libraries at public or state-supported institutions and libraries at private institutions are clearly divided on the question of assessing penalties to faculty members. Almost half the libraries at public institutions levy fines for overdue materials, while just more than one-fourth of the libraries at private institutions take such action. More libraries in both groups fine for nonresponse to recalls than for overdue materials; however, the increase is much more pronounced at the publicinstitution libraries. Looking at actual measures used for overdue and recalled materials, two distinct patterns emerge. There is a definite trend toward the use of fines for overdue and recalled materials by libraries at public institutions. Although there is an increase in the use of fines for nonresponse to recalls compared with overdue materials among libraries at private institutions, the overall pattern of these libraries reflects more the use of punitive measures other than fines and of no punitive measures.

The availability of legal measures to force payment of overdue fines for the two groups follows the pattern set above. Half of the public-institution libraries that levy overdue fines can force payment, and one-third of the private institution libraries that levy overdue fines have such measures. Almost half the libraries in both groups that assess recall fines have means to force payment; however, this apparent similarity seems to result more from the increase in the number of libraries at public institutions that levy recall fines without means to force payment than an increase in the number of libraries at private institutions that have means to force payment.

#### CONCLUSIONS

It is clear from the results of this study that there is ample precedent for the introduction of library penalties against faculty members at ARL institutions—particularly for recalled materials (fifty-five out of ninety-eight) but also for regular circulating materials (fortyone out of ninety-eight). If one adds the libraries that do not fine but take some other punitive action, such as suspending borrowing privileges or issuing replacement book bills, these ratios jump to seventy-one out of ninety-eight for regular circulating materials and seventy-four out of ninety-eight for nonreturn of recalled materials. The argument heard at Kansas that its faculty is being uniquely burdened is therefore simply without substance.

In regard to describing which libraries fine and which do not, the most useful variable investigated was the nature of institutional support. State-supported institutions clearly tend toward punitive measures, while privately supported institutions do not.

#### REFERENCES

- ARL Library Index, 1978-79 (Report of the Task Force on ARL Membership Criteria, May 1980).
- 2. United States Bureau of the Census, Statistical Abstract of the United States (Washington, D.C.: Govt. Print. Off., 1979), inside front cover.

# STEPHEN TONEY

# A Cost Database for Branch Library Resource Allocation and Performance Evaluation

A major gap in the knowledge of the management of the Smithsonian Institution Libraries (SIL), as in most libraries, is in the precise allocation of expenditures in terms of library goals. Traditional accounting systems are primarily concerned with expenditures by fund and by type of item purchased, i.e., object class or line item. However, management purposes (by which is meant planning and resource allocation, as opposed to accounting purposes) are better served by knowing: (1) for what organizational goal an expenditure was made; and (2) what users were benefited by an expenditure.

Management Control in Nonprofit Organizations by Anthony and Herzlinger offers a brief survey of accounting methods that illustrates how accounting practices have reflected the increasing importance being placed on the budget as a planning tool, in addition to the budget's traditional role as a request for funds.<sup>1</sup>

In effect, planning at the top level consists of making decisions about how resources should be allocated to fulfill the goals of the organization, and modern budgeting methods result in a document that expresses those decisions. A budget resulting from one of these modern methods clearly reflects the priorities of the organization, and thus will probably have resulted from an evaluation of priorities.

The executive branch of the federal government now practices zero-base budgeting, in which all programs are reevaluated each year in terms of the goals of the organization. However, although the Smithsonian designs its budgets using the zero-base method, the method is not reflected in its accounting systems. That is, the accounting systems used by most recipients of federal funds, including the Smithsonian, have only rudimentary capabilities to assign to expenditures the purpose of the expenditure in terms of goals. Accounting reports show expenditures by object class, which are of little use in evaluating the degree of success in fulfilling the goals stated in the budget.

### ANALYSIS OF THE PROBLEM

Conversations among the director, the budget officer, and the author established the need to tag each SIL expenditure according to fiscal year, library goal, object class, fund type, fund source, cost center, and benefit center (these items are defined below). The expenditures so tagged could then be manipulated to show total costs by any of these classsifications. The most essential of these classfications to the project's purposes were the library goal and the benefit center (i.e., the branch library). Tagging in this detail also enabled cross-tabulations; for example, the expenditures by any branch for fulfilling any goal could be isolated.

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