condition of their disciplines. Most important to this group of scholars is the freedom and encouragement to travel to primary sources and a comfortable work environment with efficient, effective services in their university library.

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RITA A. SCHERREI AND JUDITH M. CORIN

Allocation of Student Assistance Funding in the Public Service Units of the UCLA Library

As is the case in most academic libraries, the UCLA library depends heavily on student assistance to supplement its regular staff. As is also nearly universally true, money to support student help is never available to the degree that would really satisfy unit and department heads. Since there are twenty-seven separate units of the library that do receive funds to hire students, attempting to allocate to each a fair share of the limited pot is an administrative challenge.

Currently this challenge is met for the seventeen public service branches by a zero-based formula approach that relies on annual data in nine work-related areas. These areas, which are listed below, do not cover every task performed in every unit. However, they are those work areas that are common to most units and that are related to the total work load regardless of the specific ways in which tasks are carried out. The areas are the following:

1. Shelving;
2. Circulation;
3. Volumes added to the collection;
4. Serial titles maintained;

5. Public service points in addition to the circulation and reference desks;
6. Reference activity;
7. Material records entered into CLSI;
8. Patron records entered into CLSI;
9. Online bibliographic searches.

From work-load measurement in these nine areas, full-time equivalent (FTE) employee requirements are determined. A 20 percent factor for management activity and a 6 percent factor for collection development are also included in order to account for the total number of FTEs required to maintain the unit's activities. When the number of regular unit staff is subtracted from this total FTE requirement, the difference is the *desirable* number of FTE students. This number can then be converted to dollars, which in turn is compared with other units' requirements and with the total real money available. Each unit is finally allocated its share based on its percentage of the theoretical or desirable total applied to the real total.

The details of the data collection and calculations follow, as does a discussion of the advantages and disadvantages that have become apparent in the two years that this approach has been utilized.

DATA COLLECTION

Monthly statistics are collected from the li-

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brary units on shelving, circulation, online bibliographic searches, and serial holdings. Volumes added to the collection are reported by unit from the four campus technical processing centers.

Added public service credits are determined by counting reference, reserve, special collection, or other points that are staffed in addition to the ordinary central reference and circulation desks.

Records entered into CLSI are obtained from the two units that use this system for circulation.

CALCULATIONS*
1. Shelving

Each unit has an assigned time weight, based on average measures, for shelving an item. There are four possible weights, and these are ascribed as follows:

1. 0.417 minute—this figure is based on measurement in stacks with elevators, book materials, and no unusual obstacles to "smooth shelving."

2. 0.75 minute—this figure is applied to units with a single shelving obstacle. One example is a unit with two call number sequences, one the LC system and the other a form-based system that was utilized in the early days of the unit.

3. 1.00 minute—this figure, the most common, is used for units with compound shelving difficulties. Examples are stacks with no elevators or materials that need special handling.

4. 1.25 minutes—this figure is employed for only two units, both of which have unusual physical layout problems as well as many special materials.

The total number of items shelved is multiplied by the time factor and then divided by minutes per year worked by an FTE.† This yields FTE required for shelving as follows:

$$FTE_1 = \frac{(\text{items shelved per year})(\text{minutes per item})}{1.25 \times 10^5 \text{ min per FTE year}}$$

*Sherman Greenstein, formerly the administrative analyst for the UCLA library, developed the concepts for the formulas described in this section.

†Hours per year for an FTE is taken as 2,080. Converted to minutes, this is 124,800 or 1.25×10^5 minutes.

2. Circulation

The method of least squares‡ was applied to circulation data and staffing requirements to accomplish all circulation-related activities, including activities related to reserve materials.[1]

The resulting equation was

$$FTE_2 = \frac{1,003 + .089x}{2,080 \text{ hours per FTE year}}$$

where x = total number of items circulated per year.

The number of FTE resulting from this equation is compared with the number of FTEs required to staff the circulation desk with one person for every hour the library is open. For some of the small units, this latter figure is larger than the formula requirement, and the larger figure is used.

3. Volumes Added

Although the units do not do their own cataloging, there is work load involved in bibliographic searching, filing, and physical preparation for volumes added. Again, the method of least squares was applied, using data on FTE hours required for the tasks and the number of volumes added. The formula was

$$FTE_3 = \frac{686 + .42y}{2,080 \text{ hours per FTE year}}$$

where y = number of volumes added per year.

4. Serial Titles Maintained

The work load connected with serial maintenance versus number of serials maintained resulted in the following equation when the least squares method was applied.

$$FTE_4 = \frac{229 + .62y}{2,080 \text{ hours per FTE year}}$$

5. Service Points

Dividing the hours the separate reserve

‡The theory and application of the method of least squares can be found in most applied statistics texts. See, for example, chapter 17 of Yule and Kendall (1940) for an extended and classic discussion. In this case the dependent variable was staff hours required as reported by the seventeen units; the independent variable was items circulated as reported by the same units.

rooms, audiovisual centers, etc., are open per year by 2,080 results in the number of FTEs required for these extra stations.

$$FTE_5 = \frac{hours/years}{2,080 \text{ hours per FTE year}}$$

6. Reference Activity

For every hour open, a unit is given one hour of reference support except in the cases of the smallest units, where reference queries are initiated at the circulation desk.

$$FTE_6 = \frac{hours/year}{2,080 \text{ hours per FTE year}}$$

7. Material Records Entered into CLSI

For the two large units that utilize CLSI, every item record entered into the database increases the allocation by 1.2×10^{-5} FTE. This figure is based on an average entry time of 1.5 minutes per record.

8. Patron Records Entered into CLSI

A time allotment of one minute is assumed for each patron record entered. This represents 8.0×10^{-6} FTE per entry.

9. Online Bibliographic Searches*

For those units that provide their own reference searches, a flat 10 percent of their reference allocation is added to their total: $FTE_9 = .10 (FTE_6)$

Once these formulas have been applied, the staffing for each unit can be summarized by the following expression:

$$FTE = 1.26 \left[\sum_{n=1}^{9} FTE_n \right]$$

where the constant, 1.26, accounts for management (20 percent) and collection development (6 percent).

Finally, since the sum of the units' formula allocations will always be somewhat more or less than the amount of money available for student assistance, each unit's percentage of

*Online services are growing in the UCLA system. The current approach of adding 10 percent to the reference allocation will be revised once enough units have implemented the services that some reasonable allocation measure can be derived.

the total is calculated. This percentage is then applied to the real dollars available, and this is the amount actually allocated to the unit.

ILLUSTRATION

One medium-sized unit's data, slightly altered, for 1979–80 is shown in table 1. It should be noted that this unit has a shelving time weight of 1.25; it has no extra service points and does not utilize CLSI.

The total calculated public service FTE requirement for this unit is 10.28. When the management and collection development factor is included, the *total* FTE required is 13.0. This library unit employs four librarians and five library assistants, so the student assistance allocation ideally should supply the equivalent of 4.0 full-time workers. When this FTE requirement is multiplied by the average student FTE salary of $9,984, this minimum "ideal" allotment is $39,936. As it turns out, $39,936 is 6 percent of the total of all units' ideal allocations. For purposes of illustration, if the pot of money available is set at $900,000, the unit would receive $36,000 for 1980–81.

ADVANTAGES OF
THE FORMULA APPROACH

There is nothing subjective or mysterious about the allocation procedure. The figures on which the allocations are based are public; the formulas have been explained to unit heads. The allocations for all units are published. Public service is emphasized in the formula. There are rewards for good service to patrons (at least as far as these variables can measure service), and it is anticipated that

TABLE 1
ILLUSTRATIVE LIBRARY UNIT
DATA FOR CALCULATION OF
1980–81 STUDENT ASSISTANCE ALLOCATION

Category	1979–80 Statistics	Calculated FTE
1. Items shelved	255,536	2.6
2. Items circulated	80,129	3.9
3. Volumes added	3,039	0.9
4. Serials maintained	2,664	0.9
5. Extra service points	0	0
6. Hours open	3,649	1.8
7. CLSI material records	0	0
8. CLSI patron records	0	0
9. Online searching	yes	0.18

when the formula is revised, even more service areas will be included.

Finally, there is the ease of application and of revision. For example, the appropriate least square equations can be recalculated when automation is in force for serials processing without essentially altering the formula.

PROBLEMS WITH THE FORMULA APPROACH

There is currently an oversimplification of the FTE required for reference services. The formula does not take into account the quality of such services or the real quantity of work in units of greatly varying sizes. This area, along with some adjustment for online services, needs refinement.

The allocations are based on the previous year's record of basic services, and hence no expansion is built into the formula. This criticism is really more a function of total funding, since if more money were available than the sum of the basic allocations, every unit would receive a fair share of the excess.

Another problem with the year-to-year approach, however, is that no allowance is made for artificial peaks and valleys in the work areas. So far this has not been an issue, but it is conceivable that circulation or volume growth could fluctuate abnormally, and this would affect the following year's allocation. Obviously this would be apparent when figures from the preceding year were examined, and adjustments would be made. Theoretically, a running average of data could be used once the formula has been applied for several years.

The allocations depend on the accuracy of the statistics, and in some cases over the two years inaccuracies have been noted. However, these have been due to underreporting and have been corrected as they have been discovered.

The biggest criticism is that the formula does not allow for differences among units. In most cases, it can be safely assumed that the real deviations balance themselves. However, it is true that this is not always the case. In one unit, for example, recordings make up a substantial part of the collection but have not been included in "volumes added"—this

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.

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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.

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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