

**Texas State University-San Marcos  
Library Operating Letter (OL)**

Title: **Calculation of Departmental Allocations for Library Materials by the University Library** **LB/OL No. 06.02**

Department of Origin: Acquisitions  
Date of Origination: September 17, 1987  
Date Last Revised: June 18, 2007

**I. PURPOSE**

- 1.01 The purpose of this OL is to indicate the manner in which the funds set aside for departmental selection of library materials are allocated to those academic departments.
- 1.02 Specific objectives of this OL are:
- a. To set forth the rationale for developing a formula for allocating funds for learning resources.
  - b. To record briefly the history of formula development at Texas State University.
  - c. To state the current formula utilized in determining individual departmental allocations.
  - d. To indicate regulations and dates utilized in applying the formula.

**II. Formula Rationale and History**

- 2.01 The appropriation for the Library is meant to develop a collection which supports each user of library services, faculty, student or staff member, in the pursuit of his/her educational goals and objectives. To implement this objective the most substantial proportion of this appropriation is set aside to support the curriculum of this institution. This allocation is called the "Departmental Appropriation" and it is divided among the various teaching departments which make up the University.

- 2.02 The Allocation Formula was developed to ensure that a fair proportion of each annual Departmental Appropriation is allocated to each academic department. It attempts to accomplish this objective by giving mathematical weights to those factors considered to be most directly correlated with adequacy of library materials.
- 2.03 In 1966, the Faculty Library Committee and the University Library developed a formula by which to allocate book funds to academic departments.<sup>1</sup> It underwent annual changes from 1966/67 until April 18, 1969, when it assumed a stable form.<sup>2</sup>
- 2.04 In Fall 1979, the Learning Resources Center (LRC) administration brought to the attention of its supervisors and the LRC Committee the very serious problems posed by the rising cost of periodicals. The LRC recommendation was that funds for periodicals and serials be allocated by the formula in the same manner as funds for all other learning resources since 1966.<sup>3</sup> The special budget for all serials would be eliminated.
- 2.05 On December 5, 1979, the Instructional Council referred four alternative formulas to the Faculty Senate with a suggestion that these be reviewed by the LRC Committee.<sup>4</sup> The Faculty Senate agreed to this action.<sup>5</sup> The LRC Committee review resulted in a recommendation that formula Alternative 4 be utilized in determining departmental allocations. Formula 4 gave the cost-of-serials factor equal weight with the factor for the cost of books. The Committee also recommended added factors for thesis courses and mini-thesis courses.<sup>6</sup> The LRC administration accepted the entire recommendation except the provision for mini-thesis courses which were not defined.<sup>7</sup>
- 2.06 On January 28, 1987, the Library Committee voted to recommend that actual departmental average costs for monographs and serials be used in the formula, and that the Library begin to retain data so that a 3 year average could be considered in the future.<sup>8</sup> (Attachment 1)
- 2.07 In Spring 1995 the Library Committee determined that all aspects of the Allocation Formula should be reviewed.<sup>9</sup> A subcommittee to consider new factors in the formula was formed at the April 10, 1995 Library Committee Meeting.<sup>10</sup> A survey was distributed to the faculty on campus

listing a large variety of factors that could be considered in an allocation formula. The subcommittee convened in the Fall of 1995, and using the survey as a starting point, devised an entirely new formula.<sup>11</sup> The new formula was approved by the Library Committee March 29, 1996.<sup>12</sup> The Faculty Senate approved the new formula October 2, 1996, and allocations to departments for the Fiscal Year 1997 were made according to this formula.<sup>13</sup>

- 2.08 With the advent of PhD programs the formula was amended giving PhD Semester hours (SCH) a weight of 14. This was approved by the Faculty Senate June 21, 2000.<sup>14</sup>
- 2.09 In April 2005 the Library Committee considered assignment of semester credit hours for the College of Education's Interdisciplinary PhD programs. These semester credit hours will be credited to the Education and Psychology Services Department when computing the annual allocation for library materials.<sup>15</sup>

### **III. Current (1996) Formula Concepts**

- 3.0 The underlying idea of the 1996 formula is that quantity times price per item yields the total expenditure. The formula thereby groups relevant variables into two classes:
  - 1. Those that estimate how many units are needed (quantity index)
  - 2. Those that estimate the price per unit (price index)

The formula assigns an allocation index to each department, which is stated as:

$$\text{Allocation-index} = (\text{Quantity-index}) * (\text{Price-index})$$

Once all the allocation indices are known, the departmental allocation is computed by the funds available times the allocation index divided by the sum of all allocation indices. (See 3.3)

The allocation index is the average of the last two years and the new year indices, as a means to further minimize dramatic variations from one year to the next.

## 1996 Formula Quantity Index

- 3.1 The Quantity Index involves four elements. The rationale is that the larger the number in each element, the more library resources are needed. The elements are:
- a. **Number of majors.** Undergraduate, graduate, and thesis students in the previous Autumn semester counted. The count is available in the tables of the online University Online Fact Book. At the time of data collection, the count is available for the previous fiscal year.
  - b. **Full time equivalent faculty (FTFE).** The count is available in the University Online Fact Book. At the time of data collection, the count is available for the previous fiscal year.
  - c. **Credit hours taught** in the fall and spring semesters, and interim and summer sessions previous to the fiscal year receiving the allocation. Separate counts are maintained for undergraduate and graduate hours, masters graduate hours, and PhD graduate hours. The formula multiplies master graduate credit hours times four and the PhD credit hours times fourteen. The count of semester credit hours is available upon request from the University's Office of Institutional Research Office shortly after the end of the summer sessions.  
NOTE: Courses with an ED prefix will be assigned to the Educational Administration & Psychological Services (EAPS) Department. For other courses at the 7000 level the department prefix will determine which department receives the Semester Credit Hours (SCH) credit in the materials allocation formula.
  - d. **Supply of materials** in subjects related to the department. Data on titles available in subject areas is calculated according to the proportion of titles purchased by the departments from each Library of Congress classification. Supply is represented by two weighted variables: supply of monographs and supply of serials. If the two were left together, the number of serials would become negligible in comparison to the number of books.

## 1996 Formula Price Index

3.2 The Price Index involves three elements. The rationale for including price in the formula is to take into account that materials in some subject areas are much more expensive than in other areas.

- a. **Average price from vendors.** (the external monograph average price, "I", and external serials average price, "K", in computation). Annual average book and serial price data is provided by the YBP and Ebsco companies.
- b. **Average price of serials and monographs bought by departments in the previous year.** These data are maintained and provided by the library. They are represented by "J" and "L" in the formula computation.
- c. **A weighted parameter** number which regulates the importance given to the price indices. This number was chosen heuristically to minimize the number of departments with dramatic allocations changes between the 1966 and 1996 formula. The parameter 0.025 remains the same from year to year.

### 1996 Formula Computation

3.3 The departmental allocation is determined as:  
(Funds available) \* (allocation-index/total-allocation-indices)

Where the allocation index for the i-th department (that is each specific department) is given by:

$$(B-i/total\ B + C-i/total\ C + F-i/total\ F + 0.5 * G-i/total\ G + 0.5 * H-i/total\ H) *$$

$$(I-i/total\ I + J-i/total\ J + K-i/total\ K + L-i/total\ L + 0.025)$$

Where

- B = Majors
- C = FTE faculty
- F = Undergraduate-credit + 4 \* (graduate masters 5000-7000 level credit hours) + 14 \* (graduate PhD 7000 level credit hours)
- G = Supply of monographs from vendor tables
- H = Supply of serials from vendor tables
- I = Average price of all monographs from vendor tables
- J = Average price of monographs bought in the previous year

K = Average price of all serials from vendor tables  
L = Average price of serials bought in the previous year

3.4 Computation of Departmental Quantity and Price indices is:

- a. Four tables are generated, then combined to produce quantity and price indices. The tables are internal monograph supply, external monograph supply, internal serial supply, and external serial supply.
- b. To determine a **department's internal supply** of materials, a computer file of all monographs purchased by the library in the last three years is generated from the library's on-line system. The file is run in conjunction with a couple of programs, to create a list called "mono.dat" which shows the number of monograph titles arranged by LC class for each department's purchases. A file of serials purchased by the library in the last three years is obtained from the library's serials data base. The file is run in conjunction with a couple of programs to create a list called "serial.dat", which shows the number of serials titles arranged by LC class for each department's purchases.
- c. **External price and supply data for monographs** is extracted from the LC classification table in YBP's New Title Output and Price Report. The Computer Science (QA76) numbers can be researched in Blackwell's annual cost and coverage report in order to separate the math books from the computer books. A table consisting of each LC class, the number of monographs available in the class, and the average price of the monograph in the class is compiled and named "ybp.dat".
- d. **External price and supply data for serials** is obtained from the article "Periodical Price Survey" appearing in Library Journal each year in April. It provides periodical supply and prices arranged by LC classification from the Ebsco Company's serials title data base. If separation of QA76 classification is not possible, all QA's can be treated as one class. A table consisting of each LC class, the number of serials available in the class, and the average price of the serial in the class is compiled and named "ebSCO.dat"
- e. Departmental Monograph and Departmental Serial quantity and



Total 600 700 200

Vendor 2000 1500 3000

Conclusion: Quantity indices indicate that Dept. #1 buys from a smaller supply than the supply for Dept. #2. This number goes to column G.

3.5.4 Computation of departmental external average price index, the program combining internal purchase index and external price data:

	AA	BB	CC	total	External average price
Dept. #1	250	300	20	570	$(250(55) + 300(65) + 20(75))/570 = 60.96$
Dept. #2	350	400	180	930	$(350(55) + 400(65) + 180(75))/930 = 63.17$
Vendor	\$55	\$65	\$75		

Conclusion: External average price indices indicates that Dept. #1 has a lower weighted average cost than Dept. #2 this index goes to column K.

#### IV. Calendar and Application of the Formula

4.0 When the Library budget is approved on or before September 1, the following basic calendar is to be used as a guide:

**Before Sept. 1** The information necessary to compute the allocations is gathered.

**By Mid-Sept.** Departmental allocations are announced to departments along with an estimate of what portion must be reserved for ongoing serial expenses.

**May 15** Deadline to order journals or standing orders for the fiscal year.

Target dates:  
**End of Dec.** Library allocations not spent by the department by end of each target date will be spent by librarians from

**End of March** appropriate bibliographies and review sources for the  
**End of May** department in the department's disciplines.

- 4.1 When an official budget is not approved by September 1, departmental allocations will be based on a conservative estimate of the expected appropriation. The correct amounts will be inserted in the system when the annual budget becomes official.
- 4.2 Departments may request materials at any time during the year. Unfilled orders submitted when no funds are available can be returned to the departments in August for reconsideration. They may be resubmitted in September or thereafter.
- 4.3 Amounts derived from the formula may be expended on all types of library materials except laboratory equipment, materials to be housed permanently in locations other than Alkek Library, materials which are expendable such as workbooks and forms, or electronic resources licensed to only one user or when a password is required.

## V. REFERENCES

1. Faculty Library Committee Minutes, 13 April 1966.
2. Faculty Library Committee Minutes, 28 April 1969.
3. Memo, Moloney-Caputo, 9/25/79; and Learning Resources Center Committee Minutes, 5 November 1979.
4. Instructional Council Minutes, 10 December 1979, Item IV.
5. Faculty Senate Newsletter, V (23 January 1980), Item 11.
6. Memo, J. Gravitt-D.G. Hazelwood, 5/9/80.
7. LM Project 80-1 (Memo, Moloney-Watson, 5/27/80).
8. Library Committee Minutes, 28 January 1987.
9. Library Committee Minutes, 3 April 1995.
10. Library Committee Minutes, 10 April 1995.
11. Report of the Subcommittee on the Library Allocation Formula, 15 November 1995.
12. Library Committee Minutes, 29 March 1996.
13. Faculty Senate Minutes, 2 October 1996.
14. Memorandum to Library Funding for PhD Programs, 21 June 2000.
15. Report of the Library Committee in the Library's Material Allocation

Budget Formula, 27 April 2005

**VI. REVIEW**

6.01 This OL will be reviewed in March every five years, the next review is 2010.

6.02 This OL will be reviewed by the Head Acquisitions Librarian who will consult with the Assistant Vice President, University Library and the Library Committee.

**VII. INDEXING TERMS**

7.01 Allocation of library materials budget

7.02 Allocation formula

**VIII. APPROVAL**

8.01 \_\_\_\_\_  
Head Acquisitions Librarian Date

8.02 \_\_\_\_\_  
Assistant Vice President Date  
University Library