

# Implementing a “Holistic” Approach to Collection Development

James P. Kusik and Mark A. Vargas

To establish a more direct link between its collections and the educational goals of Chicago’s Saint Xavier University (SXU), the Byrne Memorial Library (BML) adopted a holistic approach to collection development. The library needed a framework that would accommodate various priorities attached to budgeting, collection development, and the university curriculum without setting up conflicting goals. To address this need, it conceived a “holistic collection development” (HCD) method to pull priorities together and enable a comprehensive approach to organizing the library. HCD seeks to break down artificial partitions in library budget accounts so that available funds can be reallocated to acquire the best mix of information resources in all formats. This article discusses how traditional library budget practices influence the selection of resources and describes how the library used HCD to effect a major transformation of its budget and collections.

## The Library

BML is the sole provider of library services and information resources for SXU. Established as a boarding school in 1847, SXU has evolved over the years into a university with a diverse student body enrolled in its various baccalaureate, master’s, continuing education, and professional programs. While the university is steeped in tradition, tradition has not necessarily been beneficial for the library. Though it occupied a state-of-the-art facility when SXU constructed a new campus in 1950, the library has undergone little change in the past fifty years, a time during which the school evolved from a small liberal arts college into a master’s-degree-granting institution of higher learning. The library’s collections and physical space no longer met the needs of a bustling, rapidly evolving urban university.

## Strategic Planning Process

Upon the arrival of a new director in 2002, the library took stock of its assets with an aim to modernize its resources,

services and facilities. Priority was given to the university’s strategic plan, which required all academic units to “develop a rolling, five-year financial plan that is fiscally responsible, supports the university’s mission, and improves the overall financial health of the institution.”<sup>1</sup> In spring 2003, a strategic planning committee (SPC) was formed to establish long-term goals for the library. The committee prepared a mission statement which called for the library to provide access to information resources “that meet the teaching and learning needs of students, faculty, staff, and others in the campus community.” This mission was incorporated in the committee’s statement of long-term goals, which stated that the library would “maintain, enlarge, and make accessible its informational and research resources in all appropriate formats.”<sup>2</sup> Yet the library faced significant challenges that hindered its ability to accomplish these goals. The SPC identified several issues:

- Increases in the cost of information resources would continue to outstrip the growth of the library’s budget. As a result, the library would own a steadily decreasing proportion of published information and research resources.
- The library’s materials budget would not increase proportionally to inflation. In addition, the materials budget would not match that of the university’s peer institutions.
- User demand for immediate access to information resources would increase, especially in regard to online access to resources.

The SPC recommended that the library “develop strategies that enable [it] to react effectively both to campus research, teaching, and programmatic growth and to unpredictable economic conditions.”<sup>3</sup> The committee charged the library with two missions: (1) establish a budget which would enable it to provide information resources for new and existing academic programs, and (2) attain a fiscal balance between various resources in order to provide the university community with a full spectrum of information relevant to its needs. Library administration determined that a thorough review of its budget and collection development practices would be needed to address the SPC’s recommendations. As no blueprint existed to guide such an initiative, the li-

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**James P. Kusik** (kusik@sxu.edu) is an Assistant Librarian and **Mark A. Vargas** (vargas@sxu.edu) is Director at the Byrne Memorial Library, Saint Xavier University, Chicago.

brary turned to the scholarly and professional literature for insights as to how it could proceed.

## Literature Review

Any major transformation in a library's collections or services necessarily begins with its budget. Yet while there is a wealth of information in the professional literature regarding the content of library collections and services for users, there is comparatively little information regarding the formulation and organization of budgets. For example, *Defining Relevancy: Managing the New Academic Library* examines user demographics, space planning, and information literacy issues, but makes no reference to library budgeting.<sup>4</sup> *Library Collection Development Policies* does address budget allocations and funding statements, but this very brief discussion focuses primarily on several examples of format-driven budget allocation models.<sup>5</sup> Library budgeting issues are analyzed more extensively in *Fundamentals of Collection Development and Management*, which contains much useful information regarding budget planning models, strategic planning, and policy statements. Yet the discussion of budget organization revolves around structured materials accounts and the funding of narrowly defined line items. Larger libraries "may have 100 or more" line items, and the authors maintain that allocations "should mirror the organizational structure of the library."<sup>6</sup> However by making allocations with this approach a library's budget can become an introspective document that primarily is concerned with maintaining structured accounts and perpetuating traditional practices. The library concluded that its collection development budget should reflect the university's academic priorities, not the library's organizational structure.

Turning to the scholarly literature on library budget management, articles on collection development tend to focus on formula-based allocation approaches. Formula-based approaches to budget allocation are pervasive in academic libraries, and they incorporate a diverse range of variables and considerations. Formula methods employed range from simple ratios and percentages to complex mathematical equations. Formula inputs (variables) can include available budget funds, circulation data, cost of materials, curriculum, full-time equivalents (FTEs), levels of funding between information formats, "aggregate topical allocations," and so on. Advocates of statistical approaches to budget allocation include S. C. Kao and colleagues, who employ differential equations to drive a data mining model based on circulation. In Kao's view, historical usage is the primary determinant for collection development allocations, therefore "the utilization of materials acquired . . . should reflect the final acquisition budget."<sup>7</sup> Mathematical models are not always applied globally across a library collection and its use by the university community. Anish Arora has proposed a model to determine the distribution of print periodical al-

locations between a library's various topical units. Arora's model does not accommodate online periodicals, stating that "predictions that electronic publication will usurp print have not yet become fact."<sup>8</sup>

Some formula approaches incorporate an ambitious range of factors to determine allocations. A review committee at the Portland State University Library (PSU) concluded that its allocation formula

should ensure the continued support of a core collection that supports a liberal education; accommodate inter-disciplinary/interdepartmental needs and be flexible enough to react to internal and external factors; support PSU's curricula, graduate and undergraduate; allocate funds strategically by aligning the library materials budget with the priorities and plans of the university; support PSU's research agenda; and consider the publishing universe by factoring in the volume of publishing and the average cost of books and serials by discipline.<sup>9</sup>

Such a multitude of inputs can be difficult to address in a consistent manner. William Walters observes that while nearly half of all academic libraries use formulas to determine allocations, few have adopted "systematic methods" to evaluate and select formula inputs.<sup>10</sup> In addition, while formulas and variables often are arbitrarily conceived and applied, they can perpetuate long after their initial premises no longer apply. Upon examining its own allocation formula, the Baruch College of the City University of New York discovered that it contained calculations that "had become arbitrary expressions of years of ad hoc annual adjustments."<sup>11</sup>

While formula approaches traditionally have focused on quantitative measures such as usage, cost of materials, or funding levels, there is a consensus that allocation formulas also should reflect qualitative measures such as curriculum and academic priorities. As a result, many libraries have reassessed their formulas to ensure that allocations are aligned with academic priorities. The Simon Fraser University Library in British Columbia, Canada revised its allocation formula under the premise that "as departments decrease or increase over time, so should the library collections budget and volumes purchased for that department."<sup>12</sup> Florida Gulf Coast University's allocation formula retains quantitative measures such as cost of materials and circulation, but notes that the formula should reflect "institutional values" and take into consideration the needs of programs and clientele.<sup>13</sup> Other approaches take into account the pressures under which most academic library budgets operate. Sulekha Kalyan observes that "as library collections budgets are squeezed by the emergence of electronic resources, proliferation of periodicals, and increasing cost of print resources . . . allocation of funds has assumed growing importance and increased complexity."<sup>14</sup> Kalyan

also states that allocation formulas should be reviewed frequently to adjust to budget constraints and “constantly changing educational priorities.”<sup>15</sup>

Another of the concerns at BML was a need to address its long-term relevancy. Useful insights were needed regarding the forces driving change in academic libraries as well as the information and services users anticipated receiving from the academic library of the future. Paula Kaufman observes that academic libraries

are now at a critically important crossroad characterized by profound transformations from carbon to silicon. The area in which ideas are created, shared and documented, which is the world in which academic librarians operate, is undergoing a transformation of unusual scale and impact.<sup>16</sup>

The traditional academic library will be transformed by an ongoing convergence of digital media and services, accompanied by rising expectations from users that libraries will adapt to an increasingly digital environment. At SXU, the library’s budget had evolved in an era where print resources predominated, and its collection development policies perpetuated acquisition practices that were increasingly out of step with the times. As little or no new additions to its materials budget was anticipated, the library would have to look within its current budget for the funds it would need to modernize its resources and services.

## Holistic Collection Development

The scholarly and professional library literature addresses various issues related to budgeting, allocations, collection development, and curricular priorities, but rarely discusses these issues as an interrelated whole. BML needed a framework that would accommodate the various priorities attached to budgeting, collection development, and curriculum without setting up conflicting goals. To address this need, it applied HCD to pull priorities together and enable a comprehensive approach to organizing the library. The library adopted the following goals which embodied HCD’s major concepts and guided implementation of its strategic plan:

- **Goal 1:** Collection development should be driven by curriculum, and collection development funds should be allocated in a manner consistent with the university’s educational priorities.
- **Goal 2:** Collection development funds should be allocated to achieve an efficient mix of information resources. Materials should be acquired according to curricular needs, not format, and duplication of resources should be avoided.
- **Goal 3:** The library budget should be organized in a manner that eliminates inefficiencies and enables effective

allocation of available funds.

- **Goal 4:** The content and organization of the library’s collections and resources should reflect the university’s curricular needs and priorities.
- **Goal 5:** The library’s budget and collections should be reviewed annually as part of an ongoing, continuous planning process.

For the purposes of HCD implementation, the library defined “curriculum” as encompassing all activities undertaken to further the university’s educational goals, including research and community outreach as well as instruction.

## Discussion

### Goal 1: Curriculum-Driven Collection Development

Traditionally, the library treated its materials budget as merely a component of its overall budget, somewhat co-equal to other elements such as facilities and personnel. The materials budget perpetuated the acquisition of materials to fulfill quotas for books, print journals, and print reference works. Collection development decisions were supported by academic literature resources that focused on the humanities and neglected the sciences and professional disciplines. Support of the university’s curriculum supposedly was the destination of these practices, but often it was a destination imperfectly achieved.

The primary goal of the academic library budget should be to obtain information resources which support the university’s instruction and research. Curricular priorities should drive collection development, and these priorities in turn should determine the collection development budget. However the library’s budget was structured so that collection development outcomes flowed from the budget, not curriculum. The budget “institutionalized” purchasing practices that worked well at a time when the library served a small liberal arts college. The budget lacked the flexibility needed to address expansion into entirely new academic areas such as business administration, and each passing year found collection development increasingly out of alignment with the university’s educational agenda. As a result few materials in the library’s collections addressed topics actively studied in the curriculum. The book collection provided evidence of this misalignment. While the library’s collection development policy requires that professional areas of study be supported with the latest scholarship, an analysis of the book collection found that 90 percent of monographs in professional fields of study were more than five years old. To address this imbalance, the library reconstituted its collection development policies to emphasize acquisition of current resources that directly supported the university curriculum.

## Goal 2: Efficient Allocation of Collection Development Funds

The library's collection development practices should be holistic. That is, the resources the library purchases should make no distinctions between media formats (e.g., print, electronic, audiovisual, micrographic) or genre (e.g., book collection, periodicals collection, reference collection). If information itself is not constrained by format, then the collection development budget and its constituent accounts should not be constrained by format either. As information continues to be delivered in an expanding array of media formats, accounts based on media or genre create artificial partitions in the collection development budget. Nevertheless, the library continued to allocate funds for individual media formats and genre areas, and media- and genre-specific accounts persisted in its budget structure. Budget allocation by format also persists in the contemporary literature on academic library practice. For example, one library recognizes that "the terms *books* and *periodicals* are historic legacies," but continues to maintain separate budget accounts for books (nonrecurring) and periodicals (recurring).<sup>17</sup> Such practices led to distortions in the library's subject coverage across media genres as well as duplication of information between various media formats.

The library also maintained separate accounts and budget lines for materials (primarily books), indexes, microforms, print periodical subscriptions, reference works, standing orders, and so on. However the emergence of full text journal databases created an imbalance in its budget accounts, which hitherto had no specific allocation for this new genre. As scholarly journals continued to migrate to full text databases, the library increased its allocations for database acquisition, which led to significant duplication of access to the library's print journal titles. Parallel funding of print journals and full text databases absorbed an inordinate share of the collection development budget, which affected the level of funding needed to maintain the book collection. The collection development budget needed to be restructured so that funds could be used to purchase resources across, not between, various media formats.

But how would the library's collection development funds be reallocated? As noted earlier, the scholarly literature addressing collection development budgets revolves around the use of allocation formulas. Formulas are impartial and therefore perceived as objective. Yet they do not adapt well to volatile conditions, particularly in an environment where costs for scholarly resources are rapidly increasing and library budgets are being buffeted by negative economic conditions. Collection development encompasses a range of interrelated activities, including selection of resources, determination of policy, assessment of user needs, and collection analysis and evaluation. Formula-driven allocation schemes tend to displace the chain of decision-making processes that is critical to effective collection development. In addition, budget allocation formulas often

are complex calculations based on enrollment, credit hours, course level, historical usage, cost of materials, and other measures of questionable utility.

Yet it is difficult to create an effective collection development strategy that excludes the use of some form of an allocation formula. To avoid the intricacies of maintaining a sophisticated allocation model, the library adopted a simplified approach: directing collection development funds to the university curriculum was best accomplished by allocating funds to each academic department based on the number of faculty FTE that teach in that department. Faculty FTE was interpreted to include adjuncts, lecturers, and all individuals with teaching responsibilities. As is the case with many non-research teaching institutions, SXU devotes the majority of its overall budget to the salaries of faculty and instructors. Therefore faculty assignments are a significant measure of its educational priorities, and the number of faculty FTE assigned to a particular discipline indicates that discipline's importance to the university's curriculum. Funds allocated to each department in this manner are spent on books, audiovisual materials, databases, or any resource that supports its program of instruction or research agenda. The library assigns a liaison to each department to help its faculty identify and evaluate materials for acquisition by the library.

Collection development allocation by faculty FTE enabled the library to eliminate its various format- and genre-oriented budget accounts and consolidate them into one pool, giving it much greater flexibility when working with academic departments on collection development issues. Previously, department requests for big-ticket items such as specialized research databases had to be addressed through a single account reserved for databases, often leaving little in the account to accommodate database purchase requests from other departments.

As allocation of collection development funds by FTE represented a fundamental departure from traditional practice, the library discussed the proposed allocation model with the university's faculty and academic leadership. A consensus was reached that the FTE allocation model would be more accurate than alternative formulas based on such criteria as credit hours, number of students, or academic program. For example, a department that has 10 percent of total university faculty FTE is allocated a 10 percent share of the library's total collection development budget. This share is expended on resources regardless of format as agreed upon by the library and the department. By no means does this allocation strategy satisfy every circumstance. A portion of total available collection development funding is placed in a reserve account which supports courses and programs for which no faculty are specifically attached.

## Goal 3: Establish an Efficient and Transparent Budget

Reorganization of an academic library's budget accounts can be a complex undertaking. Denise Troll notes that

understanding the costs associated with library resources and operations is extremely difficult and time consuming. The difficulty of allocating the costs of a particular collection or service . . . is compounded by the difficulty of distinguishing between start-up costs and ongoing expenditures in an era of rapidly changing technologies.<sup>18</sup>

In addition, a university library often does not have total control over the structure of its budget or in the manner in which funds are apportioned. It may need approval from administrative bodies such as the business department to modify budget accounts or permission from academic bodies such as the provost's office to make any significant changes to its budget. The library may have agreements with various schools and colleges concerning the proportion of development funds to be devoted to a particular field of study. In other cases faculty may have influence or authority in matters of library budget allocations and apportionment. As tradition is a powerful force which can discourage major changes in any academic budget, a library may find it easier to create new, unofficial classifications within its budget accounts to provide funding for new resources and services. BML contended with all of these elements during its effort to reorganize its budget accounts. Yet it did benefit by a certain degree of freedom to proceed, which was obtained by informing stakeholders of the changes being considered well in advance of implementation. The library organized a public relations campaign to inform its constituents regarding the need for a major reorganization and the benefits that would accrue to students and faculty, and that these changes were not intended solely for the library's convenience.

Perhaps the most difficult task encountered during the budget reorganization was delineating how funds were being spent, from which accounts, and for what purposes. In many cases allocations and expenditures were undocumented or scattered among a variety of sources. Almost 80 percent of the print resources budget was spent on reference resources and standing orders, yet there was no breakdown of what was being spent, in total, in any particular subject area—nor had there ever been a review of why particular materials were being acquired. Actual expenditures often bore little resemblance to initial allocations. Pulling together the disparate allocation and expenditure accounts into an authoritative general ledger required six months of analysis. A precise and accurate budget was established, and all budget accounts were centralized and standardized. All library staff were provided with complete breakdowns of the budget, whereas previously the purpose of some accounts were known only to a few particular staff members. Once an authoritative budget was established, the library acted swiftly to reorganize its collection development practices along HCD guidelines.

During the budget reorganization, any account which violated one or more of the HCD principles was reallocated

or dissolved outright. These included any accounts which duplicated access to resources as well as accounts devoted to preserving materials for archival purposes. A budget line for purchasing micrographic materials was eliminated, and a line for binding print journals was discontinued. Valid concerns have been expressed in the scholarly literature regarding preservation of materials for which there is no equivalent electronic availability and the need to retain copies of materials due to unreliability of long-term access to archived digital content.<sup>19</sup> However, the library determined that archival preservation of serial titles through micrographic media and bound print journals was neither part of its mission nor an effective use of collection development funds. The library is committed to a digital future and no longer purchases resources solely for preservation purposes.

In addition, budget lines for approval plans and standing orders were eliminated, as the library determined they did not satisfy its need for precision in obtaining materials which specifically support the university's curricular and research priorities. Beth E. Jacoby maintains that approval plans continue to be "an effective, time-saving tool for librarians who are increasingly pressured to devote their time to activities other than book selection," and that virtual approval plans could satisfy a need for greater accuracy by "reducing the universe of published materials to those that are most relevant to a particular library."<sup>20</sup> However, the library views approval plans as a passive approach to collection development which does not satisfy a need for greater precision in its resource acquisition. BML employs an active approach to collection development which identifies and evaluates the widest possible range of materials in each of the university's curricular areas by conducting searches in vendor databases and in global bibliographic resources such as WorldCat.

#### Goal 4: Efficient Organization of the Physical Collection

To fully realize the holistic transformation of its collection development policies and budget, the library also undertook a reorganization of its physical collections. Several projects were conducted, including off-site storage of infrequently-used materials, a reorganization of the book stacks, a review of the print journal and micrographic collections, and a reorganization of the reference collection.<sup>21</sup> These projects helped relieve congestion in the library's limited amount of physical space by allowing the removal of materials duplicated in the library's digital resources and the removal of outdated or obsolete materials. Materials removed from the physical collection were sent to an off-site storage facility, and records for these materials are retained in the library's online catalog. All such materials can be retrieved in a forty-eight-hour timeframe. The library now has a lean onsite book collection of approximately seventy-five volumes, and provides its patrons with access to more

than eighty online research databases and full-text journal databases. During the next few years the library will undergo a complete renovation, but space devoted to the book collection will not be expanded. Therefore, it is vital that the library maintain a tightly focused, up-to-date physical collection. Remaining space is critical and will be devoted to group study rooms, a computer lab, a bibliographic instruction facility, communal and private study space, and an art gallery, all within essentially the same physical space the library currently occupies.

## Goal 5: Annual Review of Budget and Collections

Equipped with a transparent and comprehensive budget, the library now undertakes a systematic review of its budget, resources and services at the end of each academic year. The purpose of this review is to ensure that library funds are expended in a manner that addresses as closely as possible the educational and research needs of students and faculty. Feedback from faculty and students are weighed and possible new acquisitions are prioritized. Shortcomings in resources are identified and plans are established for addressing gaps and deficiencies. To manage fluctuations in funding levels and cost of resources, contingency budgets for upcoming academic years are developed which accommodate several funding scenarios, ranging from a 25 percent decrease to a 10 percent increase. The library now is prepared with a transparent, flexible budget that is focused on the university's curricular needs and can be adapted to rapidly changing conditions.

## Conclusions

Upon completion of the reorganization of its budget and collections, the library conducted a review of its holistic collection development implementation. The evaluation identified several attributes of HCD and new practices the library adopted:

- HCD is a *transformative* process. HCD enabled a global transformation of library functions encompassing budget, collections, services, and physical infrastructure. Holistic transformation of the budget does not operate in isolation: to derive the full benefits of such a transformation, a reorganization of the physical collection was undertaken as well.
- HCD requires a thorough and continuous *planning* process. Holistic transformation of the library's budget and collections was guided at every stage by a comprehensive planning process. As HCD compelled a dramatic departure from traditional structures and practices, its precepts were incorporated in the library's strategic plan and collection development policy.

- HCD is a *proactive* approach to collection development. Use of the term "collection development budget" is preferred over "acquisition budget" or "materials budget." In this context an acquisition budget implies stockpiling materials to fulfill quotas and expending budget lines to fulfill the passive expectations of a traditional format-oriented, formula-driven library budget.
- HCD is a *participatory* effort. Stakeholders across the university community should be solicited to participate in the planning process and kept informed at all stages of the library's transformation.
- HCD is a *fiduciary* process. Reorganization of the budget accounts along holistic guidelines enabled the library's funds to be allocated in a more efficient manner. Consistent organization of accounts freed up significant new funds which were channeled into collection development. Efficient allocation of funds and elimination of duplicate purchasing of materials enabled the library to increase its range of resources using the same overall level of funding. Holistic reorganization of the budget enables simplicity of budget administration and flexibility to cope with fluctuations in funding levels. The budget reorganization also helped the library to compile a transparent budget, helping it fulfill its responsibility as an effective steward of university funds.<sup>22</sup>
- HCD encourages the establishment of a regular *review* process. To ensure that collection development continues to correspond with the university's curricular needs, all library resources and services are reviewed annually across a range of profiles including cost, usage, and utility to students and faculty.

The library implemented HCD to establish a more direct link between its collections and services and the goals of the university. Certainly this is not a new concept, as the mission statements and goals and objectives of most academic libraries state that their ultimate purpose is to conform their resources and services to the educational needs of the institutions they serve. The library's HCD implementation took advantage of an urgent need to modernize its operations. The library was presented with a rare opportunity to look at its budget from the ground up and deliberately align its resources and services with the university curriculum. In addition, the effects of the HCD implementation are intended to extend beyond the boundaries of the library into the greater university community, which hopefully will view the transformed library as a vital and responsive component of the academic experience, not just a place to study and find the occasional book or research article. While reorganization of BML's budget and collections was prompted by pressing fiscal and infrastructural concerns, the issue of how the structure of a library's budget influences the relevancy of its resources and services is applicable to all academic libraries.

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