Faculty Input in Book Selection: A Comparison of Alternative Methods*

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ABSTRACT

In an era of tight funding, academic medical center libraries need to determine their users' needs in order to provide cost-effective resource collections. Although faculty input is valuable, it is impractical to impose such ongoing responsibility on faculty members. This study tested an alternative method by comparing faculty preferences in discipline-specific subjects with faculty choices on corresponding discipline-specific, new-book approval slips from a vendor. Collection development librarian selections, based on formal selection criteria, were evaluated against both measures of faculty preferences. It was found that faculty members' subject ratings did not accurately predict their book choices. Implications of this and the other findings are discussed.

FUNDING PROBLEMS have affected collection development policies for the last fifteen years [1, 2]. In the late 1960s, a deteriorating economy and plateauing student enrollments brought an end to the postwar education boom and the expansionary era of Sputnik [3, 4]. The decline in support for libraries, the growth in publishing ("information overload"), the runaway inflation in book prices, and the shifting of funds away from books to serials have increased the problems of collection building [5]. Thus, the goal of a "balanced" collection for each stand-alone or national resource library has yielded to a new pragmatism [6, 7]. Even in large research libraries, the emphasis has shifted from holdings to access [8, 9]. Resource-sharing and networking arrangements have become more elaborate, incorporating new computer and telecommunications technologies [10, 11]. The special strengths of other collections are now relied upon to fill gaps, and balance is achieved through collection sharing. Online catalogs will further accelerate this process.

Book selectors today strive for cost-effective improvement in collection "performance ratings" [12] to support actual needs of local programs [13, 14]. Mechanisms for gauging local needs and for translating these data into timely selection decisions have become their preeminent concern.

Support for large undergraduate programs requires a relatively small collection of relatively high-use books [15]. The "performance ratings" of these collections are determined more by "availability rates" than by "holdings rates" [16]. Consequently, book use data are pertinent for decisions about multiple-copy needs, for helping establish selection intensity among the disciplines, for retrospective selection, for deselection [17, 18], and for comparing performance of book selectors [19–21].

In contrast to undergraduate programs, clinical, research, and advanced-degree programs require a larger investment in books of considerably lower use intensities [22–24]. As a book's specificity and depth increase, both its scope and potential audience tend to decrease [25]. Moreover, program

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size, which is a covariant of book use, cannot be a major determinant of selection intensity in libraries that serve specialized programs. Nor does book use data provide much guidance for selecting among new books on the same subject or subdiscipline [26, 27].

Faculty members are particularly qualified to translate program needs into book selections [28]. Unfortunately, it is not practical for even the most conscientious faculty member to undertake ongoing selection responsibilities. This study was designed to determine whether faculty ratings of subjects on discipline-specific profiles could adequately predict faculty book choices from vendor book-approval slips (bibliographic information without annotations). Both forms of faculty input were also compared to the collection development librarian’s choices, which were based on a formal collection development policy.

Methodology

Survey Instrument and Population

Two types of rating forms were distributed to the faculty. The first was a detailed profile of subjects in each discipline listed in the National Library of Medicine classification. These profiles consisted chiefly of terms related to the topics covered in each classification schedule, but subjects appearing in other NLM classes were included when relevant. (For example, the profile for infectious diseases was composed of headings not only from the infectious diseases section of the NLM classification, but also relevant headings from the respiratory diseases and pathology classifications.) Blank spaces were provided for faculty members to list and score any other subjects that they considered relevant. In some cases, terms from the Library of Congress classifications were used to enhance subject specificity. This was true for biochemistry and physiology, for example.

Faculty members were asked to rate each topic (important, moderately important, or not important) and to indicate its relationship to teaching, research, or both. Although “patient care” was originally listed as a function, it was later decided that faculty members in an academic health sciences center do not see patient care as a function independent of their teaching and research.

The second type of rating form was attached to each vendor book-approval slip. On these forms, faculty members were asked to rate each book as important, moderately important, or not important, and to indicate the book’s relationship to teaching, research, or both.

All faculty members in the East Carolina University School of Medicine received the profiles. Eighty-one faculty members (60.9%) scored and returned them.

Data Collection

A letter sent to faculty members with the profile explained the library’s desire to investigate alternative approaches to new-book selection. The study’s objectives were (1) to determine the best way to involve the faculty in book selection; (2) to identify ways to enhance the utility of the book collection; and (3) to identify means of increasing the cost-effectiveness of the collection. It was stressed that even if changes were made in the existing selection process, faculty members would still be able to request specific books for the collection at any time. The packet also included a list of all the profiles; faculty members were encouraged to request and score any profiles that were relevant to them.

The second phase of data collection began about six weeks after the subject profiles were distributed. Book-approval slips received from a vendor were sorted into packets by subject. The collection development librarian assigned approval slips to as many subject packets as necessary. For example, a book on cardiac surgery in children was assigned to cardiology, surgery, and pediatrics. Subject packets consisting of one to twenty slips were sent with a letter to each faculty member who had scored a profile. The letter referred to the profile completed earlier, and it acknowledged the difficulty of selecting books based on the limited information on the approval slips. Faculty members who had scored profiles received a packet of slips approximately once a month for four months.

While they were reviewing these slips, the collection development librarian reviewed the same slips to make selection decisions. The librarian considered the treatment (broad or narrow) of the subject, how the subject fit into the collection development policy, whether the publication was of single or multiple authorship or a conference proceeding, the publisher’s reputation, and the cost.

When the subject profiles were returned, all appropriate NLM or LC classification numbers were assigned to each term on each profile. Scoring data from the returned profiles were linked to the appropriate classification numbers, and a code for the faculty member’s department was affixed. Approval slip data were coded separately, by departments rather than by respondents. In addition, the collection development librarian recorded the number of faculty members who scored the...
book, her own selection decision, and miscellaneous information such as publication dates and cost.

DATA ANALYSIS

Faculty ratings of subjects on the discipline-specific profiles were compared to their ratings of corresponding books by approval slips. Then both forms of faculty ratings were compared with the selection decisions of the collection development librarian.

To make the desired comparisons, four scores were used. The number of faculty members who rated a given subject “Important” on the profiles was recorded as the High Priority Profile Score (HPRO). In addition, a Total Profile Score (TPRO) was calculated to reflect total interest of all those rating a book or a subject. This score combined the HPRO count with a reduced-weight count for those who had indicated a subject was moderately important to them.

\[ \text{HPRO} = \frac{\text{Sum of all those scoring a subject as important}}{2} \]

\[ \text{TPRO} = \frac{\text{Sum of all those scoring a book as moderately important}}{2} \]

The number of faculty members who rated a given book “Important” on approval slips was recorded as the High Priority ISBN Score (HPISBN). The number of those rating a book as important or moderately important was divided by 2 to get the Total ISBN Score (TISBN), in the same manner as the profile scores.

For the research project, the only profile data analyzed were those for subjects associated with classification numbers of the books reviewed and scored by faculty (via approval slips). To determine whether the faculty’s ratings of subjects on discipline-specific profiles (HPRO or TPRO) correlated with their ratings of individual books on those subjects (HPISBN or TISBN), a scattergram was created for each NLM class, and a correlation coefficient was computed and subjected to a t-test \((\alpha = 0.05)\).

To compare the two types of faculty scores to the selection decisions of the collection development librarian (CDL) the data for each profile or NLM class were separated into two groups: one for books selected, one for books not selected. Differences were evaluated using independent sample t-tests within profiles or NLM classes and paired-sample t-tests across profiles or classes \((\alpha = 0.10)\). (One-tailed tests were used because the alternative hypothesis predicted that if the CDL tended to select those books the faculty perceived as most useful, the faculty ratings—HPISBN or TISBN—of selected books would be significantly higher than ratings of books not selected. Likewise, if the CDL’s selections reflected the faculty’s ratings of subjects, the profile subject scores—HPRO or TPRO—corresponding to selected books would be significantly higher.) The Statistical Analysis System (SAS) was used for data analysis [29].

RESULTS

Faculty Subject Ratings vs. Faculty Approval Slip Ratings

The analysis showed that the faculty ratings of subjects on their discipline-specific profiles did not generally correlate with their ratings of new-book offerings in those subjects (Table 1). Indeed, thirty-one of the fifty-five correlation coefficients were negative (56.4%), one significantly so \((P < 0.05)\). Only two classes, QV and WS, showed significant positive correlations (four of fifty-five, or 7.3%). However, twelve of the twenty-eight profiles evaluated had N values less than 10.

<table>
<thead>
<tr>
<th>TABLE 1</th>
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<td><strong>Facility Scoring of Subjects on Discipline-Specific Profiles vs. Faculty Scoring of Approval Slips</strong></td>
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<tr>
<th>Results</th>
<th>Number of Classes</th>
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<tr>
<td>HPRO/HPISBN (Profiles)/(Slips)</td>
<td>TPRO/TISBN (Profiles)/(Slips)</td>
</tr>
<tr>
<td>Significant positive correlation*</td>
<td>2</td>
</tr>
<tr>
<td>Positive correlation—not significant†</td>
<td>9</td>
</tr>
<tr>
<td>Negative correlation</td>
<td>18</td>
</tr>
</tbody>
</table>

*HPRO classes with significant positive correlation were QV, WS; TPRO classes were QV, WS.
†Not significant \(P > 0.05\).
Faculty Approval Slip Scores vs. CDL Selection Decisions

When compared with highly recommended (HPISBN) faculty selections, eleven of twenty-eight NLM classes (39.3%) showed significant mean differences between books selected and those not selected by the CDL (Table 2). Means were higher for selected books in twenty-two of twenty-eight classes (71.4%). Faculty total interest scores (TISBN) showed significant mean differences, selected vs. not selected, in ten of twenty-nine NLM classes (34.5%) tested. Means were higher for selected books in twenty-four of twenty-nine classes (82.7%). Paired comparisons over all classes revealed significant mean differences ($P < .00005$) for both HPISBN and TISBN.

Faculty Ratings on Subject Profiles vs. CDL Selection Decisions

Only five of the twenty-three HPRO $t$-tests and only three of the twenty-four TPRO $t$-tests revealed significant mean differences between those books selected and those not selected (Table 3). Moreover, three of the five significant HPRO mean differences were negative and one of the three significant TPRO differences was negative. The small numbers of books evaluated in several classes reduce the reliability of the statistical tests. However, the class mean scores (HPRO or TPRO) in fully half of the cases (twenty-four of forty-eight) were higher for books not selected. This was also the case for the means computed over all classes, significantly so in paired comparisons for HPRO overall means.

| TABLE 2 |
| MEAN HPISBN AND TISBN ANALYSIS FOR BOOKS SELECTED VS. BOOKS NOT SELECTED |

<table>
<thead>
<tr>
<th>Results</th>
<th>HPISBN</th>
<th>TISBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant difference* between scores of books selected and not selected</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>No significant difference† between scores of books selected and not selected</td>
<td>17</td>
<td>19</td>
</tr>
</tbody>
</table>

*HPISBN classes with significant difference between scores of books selected and not selected were QS, QV, QY, WA, WB, WG, WL, WM, WQ, WR, WS; TISBN classes were QS, QV, QY, WB, WG, WM, WQ, WR, WS, WT.
†No significant difference - $P > 0.10$.

| TABLE 3 |
| MEAN HPRO AND TPRO ANALYSIS FOR BOOKS SELECTED VS. BOOKS NOT SELECTED |

<table>
<thead>
<tr>
<th>Results</th>
<th>Number of Classes</th>
</tr>
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<tbody>
<tr>
<td>Positive significant difference* between scores of books selected and not selected</td>
<td>HPRO TPRO</td>
</tr>
<tr>
<td>Negative significant difference between scores of books selected and not selected</td>
<td>2 2</td>
</tr>
<tr>
<td>No significant difference† between scores of books selected and not selected</td>
<td>18 21</td>
</tr>
</tbody>
</table>

*HPPRO classes with significant differences (positive) between scores of books selected and not selected were WE, WS; TPRO classes were WP, WS.
†No significant difference - $P > 0.10$.

DISCUSSION AND CONCLUSIONS

The investigation of a possible relationship between faculty ratings of subjects and faculty ratings of vendor slips for books on these subjects may be considered too simple to be worthy of study. However, there were no studies that had investigated the existence of such a relationship. If faculty scoring of discipline-specific subject profiles could predict, and thus substitute for, ongoing faculty scoring of vendor book-approval slips, it would provide a more practical form of faculty participation in the systematic selection of new books. Unfortunately, this study found little correlation between faculty profile scoring and faculty book scoring.

This lack of correlation may reflect the many factors besides subject matter that each individual considers in evaluating a new book. A book may be evaluated for its intended use or audience, depth of coverage, format, authorship, publisher's reputation, cost, emphasis within subject. Or it may be judged against books already on hand or against the faculty member's current knowledge of published books. For instance, a faculty member may need books in areas peripheral to main interests, or in areas where recent developments or priorities suggest either new research funding opportunities or potential applications to current or planned research.

It is possible, too, that the book slips did not bring to mind particular subjects listed on the profiles; book scope is often not coextensive with such subject listings. The profiles could also have
been scored hastily or inaccurately. For example, a faculty member might score a profile to include areas of past interest, yet score books emphasizing areas of present and possible future interest. If the books rated highly by the faculty are those that should be added to the collection, then a knowledge of faculty subject ratings appears to be of little value in identifying these books.

To determine how well current collection development practices resulted in selective collection of books of interest to faculty, the study compared faculty book scores of items selected and items rejected by the collection development librarian (CDL), who made selections based on a formal collection development policy. The CDL’s choices were also compared to faculty preferences on the subject profiles.

There was essentially no agreement between CDL selection and faculty profile scoring. A significant negative relationship was obtained in four class means and a significant agreement in only four of forty-seven t-tests. Precisely half of all class means (twenty-four of forty-eight) showed a negative relationship, as did the means over all classes. The implications of this lack of agreement for collection development are probably not significant, because faculty scoring of books did not correlate with their scoring of corresponding subjects on the profiles.

The level of agreement between the CDL’s book selection and the faculty book scores (twenty-one of fifty-seven t-tests) was not impressive. However, only six of twenty-nine NLM classes (21%) showed a negative relationship between faculty book scores and CDL selections; a positive relationship existed in more than 75% of the classes. Paired comparisons over all NLM classes revealed that CDL and faculty scoring of books were significantly related (P < .00005) when considered over all classes.

It seems likely that there is some degree of arbitrariness or uncertainty in both the CDL’s choices and in the faculty book scoring. That is, a greater degree of agreement probably can be expected on the more obvious choices or rejections. In this regard, the average selected book received 2.39 faculty “Important” votes, a 62% advantage over the average book not selected by the CDL, which received 1.47 “Important” votes. After correcting for the effect of HPISBN score on TISBN, it can be shown, however, that the average selected book received 2.90 “Moderately Important” votes, only 4% higher than the 2.78 “Moderately Important” votes for the average book not selected. This result supports the interpretation that the CDL was better able to discern books of high or low priority for faculty, but less able to gauge moderate interest by faculty. This result also points to a general lack of correlation (positive or negative) between the degree of “Important” interest and “Moderately Important” interest in a book. Therefore, if both types of faculty interest are to be considered in book selection, both will have to be measured.

There are probably two reasons for the considerable degree of disagreement between CDL choices and faculty book ratings. One reflects deliberate selection policy decisions. Faculty members, for example, are more likely to rate books without regard to the scope, content, or relative strengths and weaknesses of the library’s collection or of other local collections—all valid considerations for the CDL. The CDL, unlike the faculty member, is more likely to take price and size of potential audience into account. The second broad reason is a degree of arbitrariness or imprecision in faculty scoring, and imprecision in the ability of the CDL to gauge and track faculty interests.

This study indicates that it is unlikely that faculty scoring of discipline-specific subject profiles will aid the CDL in predicting faculty interest in specific books. When economic considerations allow, more items of interest to faculty can be collected simply by lowering the selection threshold. However, when budgets are stringent, a systematic effort to improve selection relevance might be justified. Although the CDL can, with considerable confidence, select (or reject) a certain portion of new books, direct faculty involvement might be required to improve selection among the remaining offerings. The decision to involve the faculty should be based on a careful study of the design, feasibility, and cost-benefits of such involvement.

ACKNOWLEDGMENT

The authors thank Ballen Booksellers International, Inc., for supplying an extra set of approval slips during the project.

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Received October 1986; accepted February 1987.