The literature of periodical evaluation discusses many criteria for judging the usefulness of individual periodicals to a particular library. The most important factors are subject relevance, usage, general availability, accessibility (indexing coverage), cost, format, publisher reputation, and citation frequency. Depending on the needs of the individual library, the language of the journal may also be important. All of these factors are naturally interdependent, but they can still be grouped in ways that will make them more coherent and easier to manage.

The Central State University Library serves a student population of 8,000–9,000 with a collection of approximately 600,000 books and 4,000–5,000 current periodical subscriptions. The periodicals collection occupies the third floor of the library and offers open access. Back files are not bound but are purchased in microform and shelved with the current issues. Escalating costs prompted this study to determine not only which individual titles could be canceled most easily, but also a collection development system that would ensure the most effective collection with whatever funds are available.

In managing a serials or periodical collection, it is essential to know precisely which titles are most important to the library and which would not really be missed very much if cancellations become necessary. One way of designating the relative value of periodicals uses cost/benefit ratios. These figures can be determined simply by dividing the cost of the journal by its use, or it can be computed through a more complex mathematical formula involving all possible factors. Something in between is probably more desirable, because managing the information about all factors may be very time-consuming and itself not cost-efficient. Also, it must be noted that we are only indicating relative importance; a certain amount of subjectivity is inherent in evaluation processes. It should also be emphasized that evaluation procedures and the information derived from them are aids to management. The process should be helpful in limiting the number and types of decisions necessary.

Donald Kraft and Richard Polacsek developed a formula that, with the proper grouping of factors, can be used to develop a simple yet carefully structured evaluation system. The system developed at the Central State University Library uses cost/benefit ratios and takes into account the needs of the library.

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University Library draws on this formula and employs the following structure: the cost/benefit ratio for each paid title is equal to the cost of that journal divided by the relative worth of that journal \( r = C/W \), as in Kraft and Polasek). Worth is equal to the weighted sum of other important factors: (1) relevance, which is again subdivided into accessibility, subject relevance, and format/journal reputation; (2) usage; and (3) availability, subdivided into microform availability, completeness within the library, and in-state availability. The only factor eliminated from the original list is citation frequency. At this point citation statistics are rather difficult to ascertain and maintain. For those who can manage this information, it could easily be attached to the format/journal reputation factor in the equation. Weights are an inherently subjective standard, which should be determined by the periodicals or serials librarian or an evaluation committee. At CSU, the factors are weighted as follows:

1. Relevance. Since this factor is intended to be the theoretical measure of a journal's usefulness, we weighted it most heavily (.7), thus ensuring that a standard field of materials will be available for subjects appropriate to the university. Subdivisions are weighted by varying the size of the scales applied during the evaluation process. The scales applied at the CSU Library are:

   A. Accessibility (Indexing): if the title is indexed, it is given five points; if not, zero. Intermediate points could be assigned if differentiation between indexing services is desired.

   B. Subject Relevance: points are assigned on a scale of 0–10, 10 being those journals most important to a subject area. The library maintains the collection of general interest and "alternative" publications, which are assigned points on the same scale according to their importance to the collection.

   C. Format: points are given on the scale 1–3, 3 being the best format of the "best" publisher. No journal can be assigned 0 on this factor. Relevance then equals the sum of all points assigned.

2. Usage. This factor can be tabulated two ways: points can be assigned relative to the number of uses/time period (we have chosen one year), for example, 0–10 uses/year = 0 points, 11–25 = 1 point, 26–50 = 2 points, etc., or the usage figure can be tabulated "straight." If the usage figures are not used straight, this factor should be weighted more heavily to ensure a broad range of comparison. At CSU, the weight assigned may seem small (.2), but because the usage figures are tabulated directly, this factor assumes a very important role in the differentiation of important and unimportant titles. Maintaining the relevant statistics for this factor may be a problem for some libraries. Only a closed periodicals section will provide truly accurate figures. However, a strategy devised at Case Western Reserve University can be adapted for most collections, perhaps even those that interfile books and periodicals. At Central State University, periodicals are housed on the same floor in an open collection shelved alphabetically by title. Microfilm back files are kept on special shelves with the current issues, so that the entire holdings of a title are openly available together. Use statistics are maintained by placing stickers on shelves during the reshelving procedure. Though admittedly not exact because of those users who choose to ignore the "please do not reshelve materials" signs, these statistics are still sufficient measures of relative importance. Also, the effects of whatever margins of error exist are lessened by using the "straight" figures. If the use figure indicates a journal was used 28 times during the year while it was actually used 31 (or 25), the effect on the overall formula will be very small, though it would still be sufficiently differentiated from other journals which were used 0–5, or 75–100 or more times. It should again be emphasized that the whole evaluation procedure serves merely to indicate relative importance. Use statistics as well as all other factors should be kept in that perspective.

3. Availability. This factor is not as important as the others in determining the hypothetical importance of a journal and so should be weighted smaller than the previous factors (the CSU weight is .1). It can help provide fine distinctions between titles that are close in every other aspect. As in the relevance factor, subdivisions are awarded points according to their importance. Because the CSU Library has a large microform collection, the availability of a title in microform is of more importance than the other divisions. Points (5 at CSU) can be awarded if
it is available (or if storage costs are low for a title in libraries without microforms); 0, if it is not (or if storage costs are high). Whether or not the library has the complete holdings of a title may be of some importance, if a decision for or against cancellation must be made. It might be more difficult to cancel the subscription of a title if the library already owns the complete run. Points (1 at CSU) can be awarded for complete holdings; 0, for incomplete. Finally, if a title is available to the user in another library nearby, that title may not be as necessary to the holdings of the library, but it may be much more important if it is the only subscription in the state. This factor should only be used in libraries that can equitably cooperate with surrounding libraries or where comprehensive systems of cooperation have been established. Otherwise, that other library might just cancel its subscription, too. Points can be awarded if the title is not immediately available; 0, if it is available nearby. The whole availability factor may not be important to many libraries. If it is not worth maintaining the necessary information, this factor could be eliminated without detrimental effects to the overall evaluation system. The other factors are much more important, but this factor might help make the decision if two titles are virtually alike, even down to 0 uses, and one must be canceled to meet the budget.

So, the worth of a journal is equal to a weight times the relevance, plus a weight times the use statistic per year, plus a weight times the availability. * At Central State University the equation looks like this: \( W_j = .7R + .2U + .1A \), where the relevance \( R \) = indexing points + subject relevance points + format points, usage \( U \) = the number of uses per year, and the availability \( A \) = microform points + holdings points (other library status is ignored at this time). Evaluation cards are made for each paid title including all of the appropriate information for that title.

The cost/benefit ratio \( r_j = C_j/W_j \) can be helpful in determining the relative importance of periodical titles (the smaller the number, the greater the importance). At CSU, the list of current holdings is divided by subject (or academic department) and then ranked with most important at the top and least important at the bottom.

It might be easy to presume that this number is the objective fact of a journal's importance. This assumption might be especially tempting if the librarian is confronted by the obstinate patron who demands to know why "his" or "her" journal was canceled two years ago. But the system is only developed to highlight the information and data relevant to what the library sees as the most important criteria for judgment. Knowledgeable decisions can then be made with more confidence.

**REFERENCES**


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