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Tony Greiner

Portland Community College, Oregon USA, anthony.greiner@pcc.edu

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“What Not to Buy: How to Identify Books Likely to be Unread Before Purchase.”

Tony Greiner, Portland Community College, Oregon USA.

Anthony.greiner@pcc.edu

Abstract:

This study sought to determine if there is a way to predict, before purchase, books likely to never be used in academic libraries. An unweeded community college library was selected and a random sample of unused books was compared to a second sample of items that had checked out at least three times. Two characteristics associated with non-use were found. The first characteristic was that small holdings in LC Classification ranges were associated with low book use. The second predictor was that the book came from a university or academic publisher. The academic book variable was tested against the holdings of two additional community college libraries, and the pattern still held true.

Introduction:

Large numbers of books in academic libraries are purchased, processed and shelved but are never read, browsed or touched by the readers they are intended to serve. This problem first received widespread recognition in Kent's 1979 study of materials use at the University of Pittsburgh Library. Kent found that over a seven-year period, almost 40 percent of the books in that collection were never checked out. This replicated results of a 1961 study of the University of Chicago Library by Fussler and Simon, and similar results at a junior college library, College of the Desert. (Hostrop, 1966)

Despite the development of WorldCat, which makes for fairly easy Interlibrary Loan (ILL) and easy access to items in consortia, recent studies demonstrate that the problem of too many unread books persists. A 2012 study of the Asbury Theological Seminary libraries in Kentucky and Florida found that, depending on the campus, only 30 to 37 percent of new monographs purchased between 2003 and 2008 were used. (Danielson, 2012) A 2008 study of seven elite liberal arts colleges (Bates, Bowdoin, Bryn Mawr, Colby, Colorado, Haverford and Swarthmore) revealed that 68 percent of titles in these undergraduate libraries never circulated. ⁵

Unfortunately, the problem of too many books going unread is not solved by joining a consortium. A 2011 study of the CARLI consortium in Illinois found that 33 percent of the books in the consortia were unused, (Wiley, 2011) and the Lingnan University in Hong Kong found that the number of unused items in its collection remained unchanged even after it joined a consortium of eight university libraries. (Cheung, 2011) In 2013, Sustainable Collection Services, a company that provides use analysis for academic libraries reported that of over 21 million books it has surveyed in fifty-seven libraries, 39 percent of the items never checked out. (Sustainable, 2013) Libraries continue to buy books that readers do not want or need.

While the library of a research institution may claim that its mission of supporting future research calls for this “just in case” acquisition, the establishment of consortia and computerized ILL make that argument less tenable. Is it really necessary that the 37 members of the OrbisCascade consortium own nine copies of *The Fractured Community: Landscapes of Power and Gender in Rural Zambia*? Wouldn't one copy, or two tops, of this book be enough? The argument that a book only used once might have great value to a single researcher does not justify multiple unread copies of a book.

Community and junior college libraries, particularly members of a consortia have little justification for ‘just in case’ purchasing, but there is evidence that many of these institutions are also buying large numbers of books that are never used. Ettelt's 1977 study found that over a nine-year period, 65 percent of books in a community college library had not been used. For current data, Sustainable Collection Services was asked specifically about book use in community college libraries, and they replied via email that they checked four community college libraries and found unused books accounted for 26, 38, 52 and 53 percent of those collections, respectively.

It is well established that for books already in the library, the best predictor of future use is how recently a book was used in the past. (Cheung, Chung and Nesta, (2011) Slote (1997) and Trueswell (1969.) While that knowledge will help librarians when weeding or placing books into storage, it does not give guidance on what books should have never purchased to begin with. To do that, libraries and their selectors need to know, in advance of purchase, which print books are likely to never be used. This study addresses that problem.

Literature Review

This study found a relationship between use and the number of volumes in the Library of Congress Classification Ranges held by the Mount Hood Community College library. (The other libraries used Dewey.) This confirmed the work of Trueswell, who found a strong relationship between the number of volumes in an Library of Congress Classification (LCC) and use of those volumes. The higher the number of volumes in a range, the more likely that an individual title in that range will receive use. Similar results were found by McGrath (1976) who found that course enrollment was a predictor of whether or not a book would be used. (Presumably a library would buy more titles for areas with higher enrollment.) These findings were confirmed by recent studies of Illinois' CARLI consortium (Wiley, Chrzastowski and Baker) and the Ashbury Seminary Library. At the two campuses of the Ashbury library, books from classification ranges with more than 600 titles were 11-14 percent more likely to circulate than books from smaller ranges. (Danielson)

There has not, to my knowledge, been a published source about the relationship between the type of publisher of the book and its use. The study of use in the CARLI consortium in Illinois came close. The researchers recorded circulation by publisher, but unfortunately, the names or types of publisher were not identified. It did report that, over a five-year period, the "high use" publishers, which included a mix of scholarly and non-scholarly publishers, had an average use per title

average ranging from 1.75 to 9.39. (In the CARLI study, publishers whose books circulated on average two or more times in five years were considered “high use.”) Among the “low use” publishers were a number that had very low or no-use *throughout the consortium*. Note, that means there were *publishers* whose books did not receive a single use throughout the entire consortium. (Wiley, Chrzastowski and Baker.)

Other studies that looked at which books get used examined approval plans, book reviews, and patron-driven acquisition. Ellis et al, (2010) found that books purchased via approval plans received more use than books selected by librarians. Still, depending on the Library of Congress Classification of the book, the percentage of unused books ranged from 37 to 66 percent.

Book reviews as an indicator of future use have been studied by Jobe and Levin-Clark who found, in undergraduate libraries, no real difference in the use of books reviewed or not reviewed in *Choice*. Even titles designated as “Outstanding Academic Titles” had an average circulation only 0.17 per year, compared to the norm of 0.16 uses. Over the survey period, 50 percent of *Choice* reviewed titles were checked out at least once, as were 55 percent of what *Choice* labeled “Outstanding Academic Titles.” That means that 45 percent of what reviewers determined were the highest quality academic books did not find a single reader.

While librarians might think that positive reviews in the book review literature might lead to increased book use, there is no correlation between whether a book was reviewed in well known review sources and whether a book was used. Goldhor found this true of the Evansville, Indiana public library in 1959, and more recent studies held the same was true for the libraries of Purdue University (Saunders, 1996) and Auburn University. (Williams and Best, 2006)

Patron Driven Acquisition (PDA) has received a lot of attention in recent years. Items selected by library patrons consistently receive higher use than those selected by librarians. Nixon and Saunders analyzed ten years of patron acquisitions at the Purdue University Library and found that 9,300 patron-selected books were used an average of 4.1 times, whereas the 141,000 library-selected titles averaged only 2.9 uses. Arguments have been made that patrons tend to select the “low hanging fruit” that librarians would select anyway, but Patron-driven acquisition is useful and here to stay. However few academic libraries get enough requests that they are able to use patron requests as their main selection tool.

These studies make it clear that libraries are spending a lot of money and staff resources on items that are not used. While major research libraries can justify this, more institutions would benefit from finding a way to identify which titles are likely to be unused before purchase.

Methodology and Compilation of the Data in this Study

Three community colleges libraries in Oregon, Mt. Hood, Portland and Chemeketa participated in this study. Mt. Hood Community College (MHCC) is located in Gresham, an eastern suburb of Portland. In 2012 it had a Full-time equivalent (FTE) enrollment of 9,800. There was a main library with a very small satellite branch, with total holdings of about 65,000 items.

Portland Community College (PCC) is located in Portland and the western suburbs. It has an FTE of 33,680, and about 110,000 items in the collection. There were three campuses with libraries in 2012 (four now). Chemeketa Community College (CCC) main campus is in Salem, Oregon. The FTE for 2012 was 13,580 and the library had about 54,700 items in its collection.

All three libraries were using the Millennium circulation system from Innovative Interfaces, and are members of the OrbisCascade Alliance, a consortium of 40 academic libraries, including the

University of Washington and other research institutions. For a variety of reasons, the Mt. Hood library had gone the longest period without weeding, about ten years. It was used as the starting point of this study because presumably it had the largest number of books purchased and never used but still on the shelf.

The study's goal was to determine if there were easily identifiable traits shared by unread books so that selectors would know to avoid purchasing these types of materials unless they knew of some clear reason that they would be used.

In the spring of 2013, using Millennium's "Create List" feature, descriptive and use data on the materials in the general circulating collection was downloaded from all three libraries. In all cases the information was taken from the bibliographic and circulation records, not by examining the book itself.

From this dataset EBooks, which for these libraries were generally purchased or licensed in packages was removed. Also removed were fiction, professional library books, drama, poetry, English as a second language readers, videos, reserves, and former reference books. These were removed because they were not items that would likely be used solely by researchers, or were not purchased with the intent that they would be checked out. This left datasets of books that the library acquired for the general collection for research purposes, and which were purchased with the intent that they would be checked out.

The circulation records of these titles were sorted a second time to form two sub-categories. The first was books that had clearly received use, which was defined as having three or more checkouts. The second set was items that had not received use. This was defined as books which had been in the collection at least three years, had been added since the library adopted the

Millennium circulation system, and with no recorded circulation or internal use. All other material was excluded from the study. Mt. Hood and Chemeketa reported that they did a good job of recording internal use, while this data was spottily collected at Portland Community College, so it is possible that some books from PCC were included in the ‘not used’ category, but may have received in-house use.

At Mount Hood, the first sorting left a dataset of 21,933 volumes, of which 4,730 had no recorded checkouts or internal uses (22 percent), and 7625 volumes with three or more checkouts (35 percent). Looking at the no use titles alone, annualized for the six-year span of 2004-2010, Mt. Hood’s acquired an average of 788 volumes each year that were only touched by the staff. Remember this collection was selected because it had not had a major weed done in 10 years.

For Chemeketa there were 6,634 volumes in the study set. Of these, 936 (14 percent) had no use at all, and 2,990 (45 percent) had three or more checkouts. Chemeketa has had an ongoing weeding program, based largely on non-use.

Portland Community College had 33,662 items in its study set. Of that collection 2,356 volumes (7 percent) that had never checked out or had a recorded internal use. There were 18,807 (56 percent) with three or more checkouts. Portland has had an aggressive weeding program, based largely on Slote’s “Shelf-time” system that targets books that that have not checked out for many years.

Table 1: Percentage of non-fiction books in each collection that met the definition of Used and Unused.

College	Percentage Unused	Percentage w/3+ uses
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MHCC	22%	35%
CCC	14%	45%
PCC	7%	56%

From each of the Mt. Hood data sets, used and unused, a random sample of 100 titles was chosen. In each set titles were discovered that should have been excluded from the dataset. This led to slightly smaller samples of 99 items for the unused set, giving a confidence level of 95 percent with a variance of 9.8, and 94 volumes for the used set, which provided a 95 percent confidence level with a variance of 10.1. These figures were obtained using the online calculator provided by Raosoft. (www.raosoft.com/samplesize.html)

The items in the two lists were then checked for a number of variables to see if any of them was correlated with use or non-use. These included pages, illustrations, reviews in Book Review Digest, and whether or not the catalog record indicated the book had an index, bibliography, and Table of Contents. This was done for practical reasons, and because selectors usually order materials based on a brief description in a catalog or review.

The number of pages and the absence or presence of illustrations did not make any difference on whether or not a book was used.

Table 2: Number of pages in a book compared with use.

Pages	No Use	With Use
0-99	1	1
100-199	31	36

200-299	31	26
300-399	21	17
400-499	7	12
500+	8	7

Table 3: Presence of absence of illustrations and book use.

Illustrations?	No Use	With Use
Yes	73%	70%
No	27%	30%

Puzzling Variables Associated with Use

Strangely, a decrease in use was associated with the book’s catalog record showing the book had an index, bibliography, or table of contents. I would have thought that more access points would lead to higher use of the item, but not so.

Table 4: Decreased use of books with a Bibliography, Index and Table of Contents.

The Bib. record indicates:	Unused	Used
Bibliography	82%	53%
Index	79%	48%
Contents	61%	35%

There also was a decline in use of books that had 5 or more Subject Headings.

Table 5: Decreased use of books with 5 or more Subject Headings

Number of Subjects	Without Use	With Use
0-2	49	68
3-4	25	26
5+	25	5

This didn't really make sense. Why would the number of subject headings be associated with lower use? Or the presence of a bibliography or index? Certainly no reader counts Subject Headings in the catalog entry and decides whether or not to check out a book.

A statistician and a mathematician were consulted. They both pointed out that the factors associated with lower use were all characteristics of academic books. At their suggestion, the publisher of each book in the sample set was added. This proved sound advice, as the type of publisher would prove to be a strong predictor of non-use.

In the end, two variables were found that are strong predictors of whether a book will be used or not: The number of titles in the library's Library of Congress Classification range, and if the book came from an academic publisher.

Variables Associated with whether a book is likely to be used or not.

1. Number of Volumes in a Books Library of Congress Classification

The first round of analysis was done on the collection of the Mt. Hood library, which uses the LC classification system and which had not been weeded in about 10 years. To confirm earlier observations that the more titles there are in a range, the more likely an individual title is to receive use held true, the data for the two sample sets (used and unused) was sorted by letter class, and the number of items in each letter class was counted. This was compared to the number of items per letter class in the total circulating collection, regardless of their use. If the letter class was a single letter (E) all volumes within that class were counted. If the letter class was two letters, (HF) only volumes classified by that two-letter code were counted.

Confirming the work of Trueswell; Cheung; Wiley; Danielson; and Metz, the more books there were in the class, the more likely that the books in that class would receive 3 or more checkouts, and the fewer books in the class, the less likely any individual volume would be used. Over half of the unused books in the sample set came from ranges with holdings below 150 volumes, and over half of the books with three or more checkouts came from ranges that held 600 or more books. Interestingly, although these samples were from different types of libraries, the 600 titles level as the ‘break point’ for the Mt Hood collection was exactly the same as what Danielson discovered at the Asbury Seminary Library.

Table 6: Use and the number of volumes in a books LC Classification.

Number of Volumes in LC Class	Books without Use from Sample Set	Books with Use from Sample Set
1-150	53	4
151-300	18	17
301-450	20	12
451-600	7	13

600+	1	53
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I suspect that the low use of titles with few volumes already on the shelf in that LC range is because that range reflects an area where the college does not have an instruction program, or the program does not use library resources. Selectors have not purchased many books in these areas, but it seems that even with occasional purchases, they are buying too many. Likewise, LC ranges with holdings of 600 volumes or more are likely to be areas where the college has a strong instructional program.

While the numbers of volumes in the range is a strong predictor in a library that uses the LCC, no similar pattern could be found for the Dewey Classification collections of Portland and Chemeketa Community Colleges. This may be because sorting by decades (100s, 200s, etc.) was too broad, but sorting by smaller sets was too narrow.

2 Academic and Scholarly Books are Associated with Non-Use.

In addition to the number of books already on the shelf in an LC classification, this analysis found that books published by a university press or a publisher that identifies itself as scholarly were strongly associated with non-use. For this study, any book from a university press was considered “academic,” as well as books from any publisher (or imprint) whose website called itself “academic” or “scholarly” and did not say it published any trade books. Any book from a trade publisher, or a publisher that identified itself as being scholarly and trade was counted as a trade book. This definition is imperfect, but it serves as a consistent and practical definition. There are non-academic books published by university presses, and scholarly books from publishers who identify themselves as publishing both trade and academic works, but the goal was to find easily identifiable traits a selector can use when ordering.

The results were unambiguous. Over half of the books in the unused sample came from academic publishers.

Table 7: Book use by type of Publisher, Mount Hood Community College

Book Use by Type	Titles	Percentage Never Used	Percentage Used 3+
Academic	68	72%	28%
Trade (General)	125	34%	66%

This finding was then checked against the collections of Portland Community College and Chemeketa Community College. Unlike Mt. Hood, these libraries had on going weeding programs, so some of the titles they purchased but which were never used had already been discarded. This skews the results, but the data still supports the finding that academic books are more likely to be never used than they are to be used three or more times. The confidence for each sample sets was 95 percent, with a variance ranging from 6.5 to 10. When the sample sets for the three collections were combined, the confidence level was 95 percent, and the variance for the used titles was 4.8, and for the unused, 5.4.

The results were clear. Overall, of all books that had not received use, almost half were from academic presses. (And remember, CCC and PCC had been weeded several times). For books meet the standard of 3 or more uses, only 18% were from academic presses.

Table 8: Percentage of Scholarly Books in Each Category, All Libraries.

School	% Unused	% Used
CCC	50%	25%
PCC	33%	9%
MHCC	57%	13%
Total	47%	18%

Discussion.

The purpose of this study was to see if there was an easy way to identify, in advance of purchase, those newly announced books that were highly unlikely to receive use in a community college library. It seems clear that academic/scholarly books purchased for these libraries are more likely to never be used than to get even a modest three checkouts. Furthermore, the use of titles defined as academic reported in this study is probably be inflated, because some of the books in the used category appear to be non-scholarly titles published by what is normally a scholarly press.

At Mt Hood, the only one of these libraries that had not undertaken a serious weeding project, four out of five scholarly books surveyed were never used. It is possible this ratio would have been equaled at Chemeketa and Portland, had they not been engaged in ongoing weeding programs. (Mt. Hood, with a new staff of librarians, has since done a major weed.) For community college libraries, it seems clear that scholarly books should only be purchased when the selector believes there is a specific need for that title.

While paying attention to these predictors will not eliminate the number of unread books, they can serve to reduce the number. If roughly 40% of books in academic libraries are never used, reducing that number to 20 or 25% would result in major savings with minimal loss of service.

Conclusion

This study supports earlier findings that for libraries that use LCC, a pre-purchase indicator of use is how many titles are already on the shelf in that classification. While having some material in disciplines that the school does not teach (or which do not use the library) may have value for reasons of representation, selectors are cautioned to have a reason for purchasing an academic title in these areas.

This is not to say that classification ranges and publishers should be the sole criteria for deciding not to buy a book. Metz wrote “To base library policies on use data alone would be to abrogate a serious professional responsibility... To base policies on value judgments alone, or on value judgments and untested assumptions about use, is also irresponsible and invites a very inefficient deployment of resources to the detriment of important institutional goals.” I agree.

Book use is in decline in at almost every library in higher education. From the data in this study, it appears that if selectors in community college libraries keep a wary eye on buying academic books, or books for small LCC ranges, they will better serve their students by wasting fewer resources, thereby having more titles students want, need, and use. This is particularly true for community colleges that are consortia members, or which have access to academic e-book packages and online collections such as Hathi-Trust. These can provide a sustainable method of providing access to those scholarly titles that are occasionally called for.

Suggestions for Further Study.

It is curious that Danielson's study and this one not only support Trueswell's observation that the size of an LCC range is positively associated with book use, they also show a dramatic rise in use when LC classifications reached 600 or more titles. It would be curious to find out if the "magic number" is really 600, regardless of the collection size, or if a range with a certain percentage of the total holdings is a better indicator of the "tipping point" that shows enough interest in an area to support it with additional titles. There may be a "too many" point as well, in which readers are overwhelmed with the number of choices, or have so many choices that many titles languish unused.

It would also be interesting to repeat this process with four-year liberal arts colleges and universities. Does the negative consequence of buying scholarly titles hold true for baccalaureate institutions? We know from Jobe's study that many undergraduate libraries house thousands of unused books, and while I suspect that academic books make up the majority of those items, the idea is worth confirming. A well-made study could also reveal if there is there a difference between typical undergraduate schools and those that require a thesis. Research institutions may want to do a similar study, if only for the purpose of selecting materials to go into storage. If the pattern holds true for research institutions, consortia that include one or more of them may want to develop a method of reducing duplication of scholarly titles so that they are readily available to researchers, but avoid the waste of having multiple copies of books likely to never be used.

This study was to find a practical method of identifying, before purchase, new books that are unlikely to be used in a community college. It suggests that selectors should be careful when buying books from scholarly publishers, and for libraries that use the LCC system to be careful when buying books for ranges with smaller holdings.

Works Cited

- Cheung, Sheila, Terry Chung and Frederick Nesta., "Monograph Circulation Over a 15-year Period in a Liberal Arts University." *Library Management*. Vol. 32, no. 6 -7. (2011): 419-434.
- Danielson, Robert Danielson, "A Dual Approach to Assessing Collection Development and Acquisitions for Academic Libraries." *Library Collections, Acquisitions & Technical Services*. Vol. 36, no. 3-4 (2012): 84-96.
- Ellis, Erin et al., "Comparing Approval and Librarian-selected Monographs: An Analysis of Use," in *Library Data: Empowering Practice and Persuasion*, ed. Darby Orcutt. (Santa Barbara, California: Libraries Unlimited, 2010): 53-68.
- Ettelt, Harold J. "Book Use at a Small (Very) Community College Library." *Library Journal*. Vol 103, no. 20. (Nov 15, 1978): Pages 2314-2315.
- Fussler, Herman Fussler and J.L. Simon, *Patterns in the Use of Books in Large Research Libraries*. Chicago: University of Chicago Press, 1969 p. 23.
- Goldhor, Herbert. "Are the Best Books the Most Read?" *Library Quarterly*, Vol. 29 no. 2 (1959): 251-255.
- Hostrop, Richard W. "The Relationship of Academic Success and Selected Other Factors to Student Use of Library Materials at College of the Desert." (Thesis, University of California, 1966) Page 62. Thanks to Robert Broadus for this information.
- Jobe, Margaret M. and Michael Levine-Clark, "Use and Non-Use of *Choice*-Reviewed Titles in Undergraduate Libraries." *Journal of Academic Librarianship*. Vol. 34, no. 4 (July 2008): 295-304.
- Kent, Allen and others. *Use of Library Materials: The University of Pittsburgh Study*. (New York: Marcel Dekker, 1979): Pages 12-13.
- McGrath, William E. "Predicting Book Circulation by Subject in a University Library." *Collection Management*. Vol 1, Issue 3-4, 1976.
- Metz, Paul. "Bibliometrics: Library Use and Citation Studies," in *Academic Libraries: Research Perspectives*, ed. Mary Jo Lynch and Arthur Young. (Chicago, America Library Association, 1990.): 149.
- Metz, Paul. *The Landscape of Literatures: Use of Subject Collections in a University Library*. (Chicago, American Library Association, 1983): 108.
- National Center for Education Statistics. "Total Fall Enrollment in Degree-Granting Postsecondary Institutions, 1976-2012," table 306.20, accessed July 15, 2014, http://nces.ed.gov/programs/digest/d13/tables/dt13_306.20.asp

- Nixon, Judith M. Nixon and E. Stewart Saunders, "A Study of Circulation Statistics of Books on Demand: A Decade of Patron-Driven Collection Development, Part 3," *Collection Management*, Vol. 35, no.3-4. (2010):151-161.
- Saunders, E. Stewart. "The Effect of Quality on Circulation in an Aging Collection," *Collection Management* Vol. 20 no. 3-4. (1996): 149-156.
- Slote, Stanley J. *Weeding Library Collections: Library Weeding Methods*. (Englewood, Colo.: Libraries Unlimited, 1997).
- Sustainable Collection Services, "The SCS Monograph Index." From the SCSInsight blog. Sept 25, 2013, www.sustainablecollections.com.
- Trueswell, Richard W. "User Circulation Satisfaction vs. Size of Holdings at Three Academic Libraries." *College & Research Libraries*. Vol. 30 no. 3 (May 1969): 204-213.
- Wiley, Lynn, Tina Chrzastowski and Stephanie Baker, "A Domestic Monograph Collection Assessment in Illinois Academic Libraries: What are We Buying and How is it Used?" *Interlending & Document Supply*. Vol. 39, no. 4. (2011): 167-175. Also available online at [www.ideals.illinois.edu/bitstream/handle/2142/28571/Consortial percent20Mono percent20Collection percent20Assessment.doc?sequence=2](http://www.ideals.illinois.edu/bitstream/handle/2142/28571/Consortial%20Mono%20Collection%20Assessment.doc?sequence=2)
- Williams, Karen Carter and Rickey Best. "E-Book Usage and the Choice Outstanding academic Book List: Is There a Correlation?" *Journal of Academic Librarianship* Vol. 32 no. 5 (2006): 474-478.