

## Issues in Determining Cost for Cost Per Use Calculations

Virginia Kay "Ginger" Williams  
Wichita State University, [Ginger.williams@wichita.edu](mailto:Ginger.williams@wichita.edu)

Follow this and additional works at: <https://docs.lib.purdue.edu/charleston>

An indexed, print copy of the Proceedings is also available for purchase at:

<http://www.thepress.purdue.edu/series/charleston>.

You may also be interested in the new series, Charleston Insights in Library, Archival, and Information Sciences. Find out more at: <http://www.thepress.purdue.edu/series/charleston-insights-library-archival-and-information-sciences>.

---

Virginia Kay "Ginger" Williams, "Issues in Determining Cost for Cost Per Use Calculations" (2010).  
*Proceedings of the Charleston Library Conference*.  
<http://dx.doi.org/10.5703/1288284314838>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact [epubs@purdue.edu](mailto:epubs@purdue.edu) for additional information.

## ISSUES IN DETERMINING COST FOR COST PER USE CALCULATIONS

Virginia Kay “Ginger” Williams, ([Ginger.williams@wichita.edu](mailto:Ginger.williams@wichita.edu)) Acquisitions Librarian,  
Wichita State University

### ABSTRACT

Determining the cost of materials for a cost per use calculation seems simple, but memberships, packages, and consortial deals make deciding what a specific title costs complicated. After a brief discussion of why librarians often look at cost per use when deciding whether to renew or cancel subscriptions, we'll look at specific examples demonstrating the range of issues the presenter encountered in determining cost for specific titles while compiling data for subscription reviews. Attendees will discuss the advantages and disadvantages of using different methods to assign costs for individual titles in membership, package, and consortial deal subscriptions. After this session, attendees will be aware of cost issues that should be considered when calculating cost per use for a subscription review and understand factors that should be considered in determining cost.

---

One of the goals for our Electronic Resource Management System (ERMS) is to collect all data needed for evaluating serials. We use our ERMS to track all journal and database usage, loading COUNTER-compliant statistics quarterly and importing checkout and re-shelving statistics for print titles from our Voyager ILS semi-annually. When I started entering cost data into our ERMS, I was expecting to battle with transferring data between the ILS and our ERMS. After all, our professional literature and conferences are filled with discussions about the challenges of collecting usage data, but I'd never read or heard anything about the challenges of collecting cost data. It never dawned on me that figuring out which costs to associate with which titles would be a challenge, too.

We wanted our ERMS to calculate cost per use for each title. Cost per use allows us to compare the value of titles with widely different costs. At first glance, if Journal A costs \$12,000 and Journal B costs just \$5000, then cancelling that expensive Journal A seems an easy way to reduce expenditures. But what if Journal A is used 8000 times a year and Journal B is used 100 times a year? With a cost per use of just \$1.50, Journal A suddenly seems less expensive than Journal B at a cost per use of \$50.

Maybe we should cancel Journal B. But first, let's check the Copyright Clearance Center's website at [www.copyright.com](http://www.copyright.com) and find out what the copyright fee is for articles we request on via interlibrary loan. The CONTU Fair Use Guidelines for ILL say its fair use to borrow up to five articles published within the last five years from a specific journal. If we borrow more than that during a year, we need to pay copyright fees. Since Journal B was used 100 times, we might need to pay copyright fees on 95 ILL requests next year if we can our subscription. Copyright fees vary widely; a short article from a popular magazine might cost less than \$10 but an engineering journal article is likely to cost more than \$30. Those direct costs don't include the

staff time to process requests or the inconvenience to readers in waiting for ILL and being unable to browse. We don't compare cost per use to copyright fees for every title during a serials review, just for borderline titles.

Cost per use isn't the only factor in evaluating subscriptions, but it's a good way to identify titles that are expensive in proportion to their value to the library's users and need further evaluation. Since acquisitions pays for our subscriptions, entering the cost data into the ERMS should simply be a matter of figuring out how to transfer it from the ILS where invoice payments are tracked, into the ERMS where the use data for all our subscriptions, both online and print, was regularly updated. But when I started matching titles from our ILS with titles from our ERMS, I realized memberships, packages, and consortial deals were going to complicate the process.

Single-title memberships were easy, once we identified the membership. We paid \$X for the National Autistic Society Membership and received one publication, *Communication (England)*. We entered the membership cost in the ERMS for that title and added the membership title in the cost notes field.

Multi-title memberships were more problematic. For example, we receive four titles with our membership to the College Art Association of America. My first thought was to divide the membership cost equally among the four titles, but since one title, *CAA News*, seemed to be an association newsletter while the other three titles sounded like more substantial publications, I doubted they were really of equal value. The titles were only available to members, so I couldn't use individual purchase price for the cost of each title. Since this membership was for print titles, I checked on our retention schedule. We retain and bind two of the four titles, so I divided the membership cost equally between those two titles and assigned no cost to the others. In this particular example, where the membership cost a bit over \$500, dividing the cost equally among all the titles would have resulted in each title costing \$125; instead, I assigned a cost of \$250 to the two titles we bound and kept and treated the other two as freebies. I also added a note to the ERMS cost record for each of the four titles, listing the membership and indicating how the cost was divided. The note had two purposes; it would help acquisitions enter costs consistently in the future, and provide our subject librarians information they needed to make decisions since the titles in this package must be renewed or cancelled together.

My next challenge was a multi-title package where the titles were available separately. The British Psychological Society Journals package included eleven titles at a cost of \$3558. The titles could be purchased separately at prices ranging from \$240 to \$542; those separate prices totaled just over \$4000. If I divided the package cost equally among the titles, each would be charged \$343 which was more than some cost individually and less than others did. Using the cost for purchasing titles separately would be simple, but would overstate the total cost of the package. I finally decided to use the individual purchase prices to calculate a proration percentage for each title, which reflected the how the cost of each contributed to the total cost of the package without overstating the total cost. I also added a note to the ERMS cost record for each title, indicating the package name, the total number of titles, the package cost, the total cost of titles purchased separately, the cost of the specific title purchased separately, and that

package costs were prorated in proportion to separate prices. That note was complicated, but once again, I wanted to assist in maintaining consistency while providing librarians information. I'm a fan of providing subject librarians with information in serials reviews because I have very clear memories of the first time I had to explain to an engineering professor that it was actually cheaper for the library to receive a specific title than to cancel it, because cancelling it would lose us a package discount. Detailed cost notes are helpful in those situations.

My neat guidelines broke down with the American Fisheries Society package because only four of the five titles were available separately. I couldn't divide the cost proportionally, because I didn't have a price for the fifth title and it wasn't an ephemeral title. The package cost of \$1277 was less than \$100 higher than the total prices for the four individually available titles, so it seemed unreasonable to assign the difference between the package price and the total of the individual prices to that unpriced fifth title. Three of the four individually available titles were priced at \$352 each while the fourth cost \$162 to buy separately, so dividing the package cost evenly among the five titles would understate the cost of those titles while overstating the cost of one. I wasn't happy with any of these options, but I finally divided the package cost equally among the titles and added another long note about the package for each title.

To my surprise, the titles we receive in packages with multi-year license agreements were easier to handle. Unlike the small memberships and packages, these large title groups were collected into databases in the ERMS, so we could enter cost data at the database level, the individual title level, or both. The multi-year packages fell into three categories, exemplified by our Sage, ScienceDirect, and Springer packages. The simplest was packages like Sage, where we paid for an entire package and did not receive a title-by-title invoice. The ERMS allowed us to enter the package cost on the database record and check a box to automatically distribute that cost equally among the titles for cost per use calculations. We added a note with the package name for each title, to alert librarians looking up individual titles that they should consult the database record.

With ScienceDirect, we subscribed to specific titles, received a detailed invoice with pricing for each title, and had limited rights to cancel or swap titles during the license period. We simply entered the individual costs and added a note: "ScienceDirect package. Limited title swap and cancellation until [date]." We then added a cost record at the database level of the ERMS, which automatically displayed the total of the individual title costs for anyone who needed that information.

The Springer package was more complicated. It was a consortium deal where we subscribed to specific titles and paid a consortium access fee to have online access to the titles to which our partners subscribe. We received an itemized invoice for the titles to which we subscribe, so we had prices for those titles. But we debated how to handle the access fee. It was not really part of the cost of our subscribed titles, so it didn't make sense to prorate it among them. Should we have pro-rated it among the titles we could access due to partner subscriptions? That's what the access fee was really for and we did have use data for those titles, but we don't have any control over those titles; we can't cancel them in a serials review and using a prorated access

fee might suggest that we could subscribe to the title at a very low price. We finally decided to enter individual title prices for our subscriptions and enter the access fee at the package level. We used two notes for titles in this package, “Springer package. Limited title swap and cancellation until [date]” or “Springer package. Access through consortium arrangement where WSU pays access fee and other libraries pay subscription.”

Having worked through these issues in consultation with our collection development and e-resource librarians, I propose some guidelines for resolving cost issues when determining cost per use. They are:

- Assign cost at title level whenever available.
- Use amount actually paid, not list prices.
- Make notes so costs can be assigned consistently in future.
- Make notes to alert librarians to memberships, packages, and discounts that might be lost if some titles in package are cancelled.
- Make notes to alert librarians to multi-year licenses with restrictions on cancellations.
- Make notes to inform librarians of titles where access depends on a partner library’s subscription, so if faculty suggest cancelling these titles, the librarian can explain that these aren’t being paid by library.

Several good questions came up during the discussion period. How much time did it take to enter all the cost data into the ERMS? Is it worthwhile to invest time in tracking cost-per-use data, especially when many subscriptions are purchased in large online packages? Doesn’t it take an incredible amount of time to enter notes about cancellation restrictions on big packages like Science Direct? Do selectors really use the notes? Were you able to export data from ILS and into ERMS or did you have to enter manually? What would you do differently next time?

Entering cost data the first year took an incredible amount of time; two staff members and I worked on this project for about six months. Some weeks, we spent as much as half our time on it, but overall we probably averaged 15-20% on this project. It isn’t taking nearly as much time this year. We made several attempts before working out a reliable process. Our ERMS (Serials Solutions) allows us to export cost data upload templates with database/title/ISSN/SerialsSolutionsID, so our first attempt was to export invoice data from our ILS and use some spreadsheet magic to match it to the ERMS templates. Between problems with exported data, data errors introduced while dealing with titles that had multiple invoices, and the lack of match points between ILS data and ERMS templates, we eventually decided to start over. Our second try used downloaded data from EbscoNet; the data was cleaner but we still had a problem with lack of match points; only 20-25% of titles could be matched using spreadsheet formulas because the ERMS and EbscoNet spreadsheets didn’t use the same ISSN for many titles. We manually transferred most of the data, working with two spreadsheets open to identify matching titles and copy cost data. After matching as much as possible that way, we spent more time looking up subscriptions that aren’t paid through Ebsco and figuring out how to handle memberships and packages.

Updating the data is taking much less time this year, because we worked with Ebsco to have our ILS numbers and fund codes to EbscoNet and we entered that data into the ERMS with the FY2009 and FY2010 cost data. That process was part of the time we invested the first year, but it's allowed us to create match points. The process is still cumbersome, since the ILS number and fund codes on the ERMS cost record for one fiscal year doesn't transfer to the next fiscal year automatically, but a test run suggests I'll be able to automatically match 85% of the titles this year with about three days of spreadsheet work, leaving 15% for staff to do manually. Most of the manually work will be for print membership and package titles. We've worked the update into our normal routine this year.

At present, we still consider the effort of updating cost data in the ERMS worthwhile, although I expect that to change over the next decade. We're a medium-sized academic library, so we have few complete publisher packages of online journals. Most of our online packages are for selected titles, individually priced, with a requirement to maintain a certain expenditure level and options to swap titles. We're not in the all-or-nothing cancellation mode for online journal packages. Although we've been moving from print to online when possible, we still have many print subscriptions to evaluate, too. And, we need some way to match usage data from multiple sources with cost data; our ILS can't handle usage data while our ERMS can handle cost data to some extent. The only other option we have for matching the usage and cost data is to maintain a customized database, which would take even more time. I hate duplicating data in the ILS and ERMS, but the ILS meets our needs for fiscal control, while the ERMS meets collection development needs for matching usage and cost data, so we'll continue updating cost data in the ERMS for the next few years at least.

Entering notes did take time, but it wasn't as much time as you might think and it's already proved worthwhile. Since we were using a cost data template spreadsheet, when I decided to enter a note for every title in a big package, like Sage, I entered it one time then just copied it to other titles in the package. So the big packages took about 5 minutes each, mostly deciding on wording of the note. The smaller membership and package title notes took more time, because I had to word each note separately, but now that all the decisions about how to handle cost data for them are recorded, the staff has been able to update costs for them instead of me having to look at them again. As for whether selectors use the notes, they haven't used them much so far, but our collection development librarian is using them as she organizes a serials review.

What would I do differently next time? I'd work out procedures, then do a test run with a hundred titles before tackling the full job; we spent much too much time working with data exported from the ILS before we discovered that the data was unreliable due to various factors. A test run would have alerted me to the membership/package issue, so I could have started working on it earlier. A test run would have alerted me to the scarcity of match points, so I could work out strategies for dealing with that problem earlier. I'd enter cost data for databases and packages like Sage, where we pay one price for all titles and don't have itemized invoices first, so we didn't have to keep looking at those titles. We're working on the FY2011 cost data upload now; it is going much more smoothly and quickly because I did do a test run this year to be sure my revised procedures would work.