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Analyze This: Altmetrics and Your Collection

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I finished with the list, I gave it to the Special Collections Librarian for review and she turned those books and others she thought should be transferred downward on the shelves, so that they would be easy to identify. The Senior Library Assistant in Collection Management agreed to remove the books from the shelves, but before she took them to cataloging, she verified them against the list created by the Systems Librarian. Although the area had been inventoried about three years ago, there were still items on the shelves that did not appear on the pull list.

As we got further along in the project, the Head of Special Collections became a woman possessed. She could not weed enough books! After the first round, she requested that I come up to the area for an evaluation. We did a walk-through of every shelf, and agreed on additional titles that were more aptly suited for other areas of the library. We did a second and third round where we weeded the science, photography, literature, performing arts, religion, sociology, psychology, business, criminal justice, and political science books.

When the dust settled, and there were many, many dusty books on those shelves, we had actually transferred 3,900 books, which went to Circulation, Reference, the Youth Collection, and the library on our **Avon Williams Campus**. Since I had made the effort to weed the E, F, and G sections before the transferred books started coming out of Cataloging, the Circulation Supervisor and the Stack Supervisor said nothing to me about not having space to shelve them. The Special Collections Librarian was able to bring some of her most popularly requested items out of the storage rooms and on to the shelves in her area.

This project was not successful just because we changed the semantics. All of the concerns of the stakeholders were taken into consideration and systematically addressed. Since this is my seventeenth year at the library, I think I have a pretty good feel for the motives and attitudes of the personalities involved, as well as a history of how past library projects had been facilitated. At bottom, everyone knew that there was a problem that needed to be fixed in the best interests of the students, but agreeing on a way forward was the sticking point. Some people were more passive than others, but they were willing to do the work. Looking at the political atmosphere of the library, I decided that having meeting after meeting to try to get everyone on the same page was not a viable option, because the passive enablers were not going to be at the table and those who were at the table, were not going to speak up. In Collection Management, where you have to deal with so many different personalities, it's important not just to have the ability to assess your collection, but also the politics of your work environment and how you can operate within it to move your agenda forward for better service for your patrons and more effective usage of the collection. 🌱

Analyze This: Altmetrics and Your Collection — Statistics & Collection Development

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When there were only print journals, managing your collection was much simpler; you knew what you subscribed to, who checked it out, and who requested new journals. When journals moved online, the world became more complicated. Often, the journals were part of databases and the databases came from several vendors who all had their own way — or no way — of reporting usage to you. In 2002, an initiative known as **COUNTER (Counting Online Usage of Networked Electronic Resources)** formed to standardize library usage statistics. Librarians, publishers, and intermediaries cooperated with this initiative and created standard ways of reporting usage. Now, over ten years later, **COUNTER** statistics are still a good tool to assist librarians in managing their collections.

Citation counts are another set of statistics important to research and researchers, and hence by extension librarians making collection decisions. In the 1960s, publishers and others developed a methodology that determined the impact of research based upon article citation counts. From this approach came many statistics, the most popular being **Thomson's Journal Impact Factor or JIF**. There are many complaints about statistics based upon citations, including self-citation and superfluous citations. However, the biggest problem in using JIF and others is that in today's research landscape they are lagging indicators.

The world keeps changing. Over a decade ago, the great shift from print to online had been going on for some years and everyone was getting comfortable managing and purchasing online content. Now, there are other new great shifts happening. Some of these are technical — cloud computing and smartphone apps. Some of these are social and cultural — mandates for open data and open access publishing. And some of these are both, such as the rise of social media. You used to figure out what was significant in the world by reading newspaper headlines or listening to the top stories on the six o'clock news. Now, it is Twitter Trends. A similar acceleration is going on in scholarly communication. When we went from print to online journals it was like going from train travel to air travel. With cloud computing, smartphones, open data, social media and all of the other new ways of interoperating, we have gone from air travel to space travel.

In this accelerated age, it is still important to understand how your institution uses your collection, and **COUNTER** statistics are still good for this. However, now it is also important to understand how the world uses your institution's research. Citation-based statistics are not the way to determine this. According to **Brody and Harnad (2005)**, it takes five years for a paper in physics to receive half of the cited-by references that the article will ever acquire. If you want to keep pace with your researchers, you cannot make collection decisions based on five-year old information.

With so much interaction between scientists and researchers, you do not want your library left behind wondering what is happening.

Alternative metrics, also known as altmetrics, is a new and modern way to assess research impact that takes into account all of the ways individuals interact with research apart from citation counts. Full altmetrics looks at research artifacts beyond articles and tracks things like presentation slides, datasets, videos, books and book chapters, and figures, to name a few. Then, full altmetrics tracks many metrics about these artifacts including downloads, views, bookmarks, tweets, book holdings, ILL requests, and more. It is by looking at all of this data that you start to get an accurate picture of research impact and an understanding of what the researchers at your institution need.

Looking at alternative metrics can help your collection. By knowing in which journals your faculty publishes, you can ensure that you subscribe to these journals. Not only will your faculty be appreciative of this, but also your students will have access to research that is important to your institution. In addition, you will have a better understanding of the usage and other categories of metrics about your resources beyond your own institution's **COUNTER** statistics.

The Changing Nature of Collection Development

According to an **ARL Issue Brief**:

Twentieth-century research library collections were defined by local holdings, hailed as distinctive and vast. Twenty-first-century research library collections demand multiple strategies

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for ensuring broad access. Never before have we been required to grasp so many dimensions of research in order to make wise decisions. In a networked world, local collections as ends in themselves make learning fragmentary and incomplete. (ARL, 2012).

Your library collection is much more than the electronic resources you purchase. As a librarian, you also take great care to highlight other important resources. You do this by carefully creating LibGuides and other Web pages, teaching information literacy classes, performing as liaisons to the researchers, conferring at the reference desk, and other ways of interacting with students and faculty. In ARL's 2013 report "Transforming Liaison Roles in Research Libraries," they argue that changing technologies, more digital information in more formats, changing research methods, and new practices of how scholars communicate and disseminate their creative work, demand that librarians' roles in collection development and in other areas need to evolve, too.

To be conversant in the disciplines that are important to your institution and the research they are conducting, you need to know what the world is consuming in those disciplines. Which journals are your faculty publishing in? Should they be considering Open Access journals more now than they have in the past? Why? Is your institution developing data hosting and archiving for your researchers? Are there Institutional Repositories that contain articles your faculty has published? What presentations have your faculty given that are grabbing attention around the globe? What research is your faculty paying attention to? As you can see, there are a myriad of questions that you can answer that help inform your collection decisions that could improve the resources you provide to your library constituents.

Expanding Role for Librarians

Librarianship does not start and end with providing good collections, pointing individuals to the correct resources, and answering questions. Librarians have the opportunity to participate in their institution's research process in a valuable way.

According to the Registry of Open Access Repositories Mandatory Archiving Policies (ROAR-MAP), by the end of 2013 over 240 universities and over 90 research funders had adopted open publishing mandates. Just ten years ago, these mandates were practically non-existent; they have been growing rapidly year over year. In many institutions, libraries and librarians play a major role in creating, maintaining, publishing, and promoting their institution's open repositories. By using altmetrics with your open repositories and publishing initiatives, you can provide the authors and faculty with metrics about their articles, papers, data, and other research artifacts. While the mandates to publish are a "stick" approach to getting your faculty to use your Institutional Repository, you can use metric information to deploy a "carrot" approach to inform them how the use of your Institutional Repository has helped the spread of their research.

Researchers want their work to be shared, discussed, and applied. It is difficult to objectively know if their research is having an impact. By



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using altmetrics, librarians have another positive way of helping the researchers on their faculty. Librarians can provide author profiles and reports of how their research artifacts are utilized in many areas such as downloads, bookmarks, tweets, blogs, and citations. This service has the potential to elevate librarians and their role in the minds of the faculty. In turn, librarians can assist the faculty in understanding some of the best places to publish and promote their work.

It has long been the role of librarians to assist in determining research impact. Over the years, this role diminished as the reliance on purchased tools such as Web of Science and Scopus became popular. However, as this article states, research impact is more than statistics based on citation counts, and indeed is more than research articles. To appreciate impact it is important to understand how the world is interacting with research artifacts across the five categories of metrics. These are 1) Usage, e.g., downloads, 2) Captures, e.g., bookmarks, 3) Mentions, e.g., blogs, 4) Social Media, e.g., tweets, and 5) Citations, e.g., Scopus. By looking at impact information across these categories, you can become a well-versed partner to your faculty and your institution by stepping into the position of understanding and assessing research impact.

The Bottom Line

Alternative metrics is a new and growing field. Thus, using them in librarianship

is also very new. This represents a huge opportunity for librarians. By bringing altmetrics into their libraries and institutions, librarians can play a larger role in the research process. Altmetrics can help librarians make important collection decisions regarding which electronic resources to purchase and which other resources to highlight. Librarians can use altmetrics to assist faculty in understanding the scholarly communication landscape, promoting faculty research and highlighting emerging scholarly fields while providing leading edge metrics that represent the most current interpretations of research.

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