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Chemistry Division

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News from the Chemistry Division

Chemistry Division Teri Vogel, Chair

The Chemistry Division is concerned with chemistry and chemical technology, and the economics, educational advances, and information handling of developments in the field of chemistry and related subjects.

We are heading into the final two months of the year. Now that the rush of orientations and (for some) fall teaching is winding down, please take a few minutes to verify that your SLA membership and division affiliations are up to date.

Also, if you were unable to attend Judith Currano's excellent webcast, "Chemical Information for the Non-Practioner," the slides and recording are available (http://bit.ly/bp3erL, which includes a link for the recording). This event was jointly sponsored by the Philadelphia Chapter and Chemistry Division.

There are some DCHE projects that will carry us into next year, including a new strategic plan and possibly a new web presence as SLA launches a Wordpress-driven content management system (CMS) for the unit websites. And of course, planning is underway for the 2011 Conference in Philadelphia. Chair-Elect Bill Armstrong, Professional Development Chair Ted Baldwin, and others on the 2011 Planning Team have put together a great list of sessions and CE courses that will make Philadelphia worth the trip.

Are you looking for ways to expand your professional development and service dossier for 2011? We still need more DCHE members for key committees like Membership, Sponsorship, and Professional Development, as well as an Alignment Ambassador and more *SciTech News* writers. Please contact me (tmvogel@ucsd.edu) or Bill Armstrong (notwwa@lsu.edu) after January 1 if you are interested in getting more involved in DCHE.

Finally, it has been an honor to serve as your DCHE Chair this year. I think we've had a good year, and I know that next year will be even better. I want to extend a special thanks to the DCHE Executive and Advisory Boards, as well as to our Sponsors, Conference Planners, and everyone else who contributed their valuable time and resources to our Division. ❖

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Conference Report – American Chemical Society Meeting, August 22, 2010 – Boston
Assessing Collections and Information Resources in Science & Technology

Submitted by Teri M. Vogel, Chair, Chemistry Division

On August 22 the ACS Chemical Information Division (CINF) hosted "Assessing Collections and Information Resources in Science and Technology," a joint symposium organized with the SLA Chemistry Division (formerly the Trisociety Symposium). We heard how librarians and vendors are using quantitative and qualitative tools to assess collections and user needs. The presentations are online at the ACS CINF Boston Symposia website (http://acscinf.org/).

Usage Metrics: Tools for Evaluating Science Monograph Collections

Michelle Foss Leonard, Dr. Vernon Kisling, Donna Wrublewski, and Stephanie Haas, University of Florida [mleonard@uflib.ufl.edu]

As the University of Florida Libraries move toward a business-based budget model, it's important for them to justify collection spending and identify how the collections are being used by patrons. Michelle and Donna shared how the Science Library analyzed circulation patterns, purchases, and usage statistics from July 2008 to June 2010. They gathered data from their ILS on monograph purchases and checkouts by LC subclasses and user groups like graduate students. The librarians could look at circulation by LC subclass and user group like graduate students, identify high-circulating QD subclasses (which they highlighted during the presentation using TagCrowd), or analyze the circulation for monographs purchased in 2009. They also completed a 6-month in-house use study to identify materials where buying the online equivalent might be warranted. Other studies include analyzing the Springer e-book usage by LC to identify what titles are being accessed and how many times, and they also had a 6-month patron-driven e-book pilot via MyILibrary, where 2 checkouts triggered an automatic purchase of the book.

Among their conclusions:

- With data extraction limited to LC classes and/or subject headings, analyzing for subjects like nanotechnology can be more challenging.
- Call numbers and/or subject headings should be a mandatory part of e-book cataloging, to allow the data mining and analysis.
- As more e-books are purchased, collection management policies need to be adapted accordingly.

For more information, see Metrics and Science Monograph Collections at the Marston Science Library, University of Florida (published in the Summer 2010 ISTL).

Happily Ever After or Not: E-book Collection Usage Analysis and Assessment at USC Library

Norah Xiao, University of Southern California [nxiao@usc.edu]

Norah reported on the results of a survey she sent out to her chemistry and physics/astronomy faculty to gauge their awareness and use of the Springer E-Books collection, which the University of Southern California licensed in 2009. There were 15 questions, and 39 chemistry faculty responded. Some of the highlights from her survey results:

- 82% were aware of the collection.
- 62% learned about the e-books from Norah.
- 46% accessed the e-books from the catalog.
- When asked about the frequency of e-book use, "rarely" got the highest response.
- Most agreed with the statement that they treat e-books as regular consulting materials like journal articles.
- Most of the respondents strongly agreed that PDFs were the preferred format, and strongly disagreed about the need to read the content on alternative devices.
- Half had used other e-books, and more than half responded they would support future e-book acquisitions by the Libraries.

From Chemical Abstracts to SciFinder: Transitioning to SciFinder and Assessing Customer Usage
Susan Makar and Stacy Bruss, National Institute of Standards and Technology [susan.makar@nist.gov]

Susan shared her library's experience of moving from STN to SciFinder. This transition included assisting their customers with revising their complex STN searches into accurate, comprehensive SciFinder search strategies, as well as educating them on using SciFinder. The move from STN to SciFinder resulted in a 6-10x increase in usage, with the chemists being the largest group of users. With one seat the user success rate has been about 60% (with one month at 40%). SciFinder was being used about 200 times/month; searches peaked at 1200 but generally have been closer to 800 searches/month. They discovered one customer has been responsible for half of their usage, with the top 10% of their users responsible for 84% of the usage. Other trends they noticed: usage by non-chemists had decreased, few were using the alerting feature, and substance searching was increasing as reference searching decreased. They are planning to add 2 more seats, but will still have to find ways to manage the very high use by those few customers.

Using Web of Knowledge to Identify Publishing and Citation Patterns of Campus Researchers at the University of Arkansas
Lutishoor Salisbury and Jeremy Smith, University of Arkansas [lsalisbu@uark.edu]

Luti presented results of campus-wide studies her library conducted in 2007 and again this year. Their objectives were to identify the major departments of research output and to evaluate the comprehensiveness of the library collections in terms of where their researchers publish and what they use. Luti and her colleagues searched Web of Science for papers written by the faculty and then extracted the citation information, addresses, document type, and cited references into a file that can be imported into Excel for analysis.

They get e-journal usage statistics from the publishers like so many libraries, but Luti also pointed out several factors that can affect those numbers: being an ILL net lender, class assignments where students are accessing the same article, and even library instruction sessions. By looking at data like cited references, they get a better picture of journal usage by researchers.

Don't Forget the Qualitative: Including Focus Groups in the Collection Assessment Process
Teri Vogel and Susan Shepherd, University of California San Diego [tmvogel@ucsd.edu]

The UCSD Science and Engineering Library recently conducted focus groups with faculty and graduate students from the physical science and engineering departments. The participants were asked about favorite resources for research and if Google Scholar plays a role, how they keep up with new research, how they organize and manage what they find, and other questions as time allowed. Teri summarized the results from the chemistry focus groups. The answers they received from all of the focus groups will help them create a more detailed user survey that will go out in the coming months and have already given them fresh ideas for website improvements and where to focus instruction efforts. While the focus group process is very difficult and time consuming, the librarians found it valuable—as did the participants who appreciated the opportunity to talk about their research process.

Some of the observations from the Chemistry graduate student focus groups:

- Google Scholar is a go-to resource for many of the students, but none of them indicated it was their only resource. All of the students said they use SciFinder, PubMed, and/or Web of Science. The SciFinder users expressed a definite preference for the client version.

- Most of the students "save" the articles by printing them out, and some save the articles to their computers as well. Adoption of bibliographic management tools was low.

- The students used different methods to keep up with research: journal clubs, TOC alerts by email or RSS, and searching Google or the databases on a regular basis. Nobody had set up database search alerts.

Teri also shared some of the feedback they received across all of the focus groups: some surprising (users linking and returning to online PDFs multiple times) and not so surprising (confusion over library jargon and SFX resolvers) comments.

Data-driven Development: How ACS Publications Uses Data to Enhance Products and Services and Respond to Customer Needs
Sara Rouhi and Melissa Blaney, ACS Publications [s_rouhi@acs.org]

In the sole vendor/publisher presentation of the day, Sara shared some of the projects that ACS Publications has been working on to improve their understanding of user needs and behavior, and how they are applying that information to improve both the content and platform. They have been looking at "key performance indicators," items that help define what users are looking for and how they behave when they're on the ACS Publications site. She also discussed how they are using metrics beyond COUNTER—including searches, web traffic into the site, geography, individual journal usage, browser/OS information, and most visited items—to define product strategies and to enhance the platform. Sara shared results of surveys sent out to ACS Mobile users, to find out what devices are being used and how are people using them. They also utilize comprehensive user testing, focus groups, customer surveys, and direct feedback, because web usage doesn't always tell them the whole story. A new outreach program is ACS on Campus, a two-day program of seminars and focus groups that is hosted by the library. Sample topics have included research strategies, ethics and copyright, scholarly publishing, the peer-review process, and alternative careers in chemistry.

Objective Collections Evaluation Using Statistics at the MIT Libraries
Mathew Willmott and Erja Kajosalo, MIT [willmott@mit.edu]

Mathew shared how MIT has taken a very data-driven approach to evaluating their serials collection, which makes up 85% of the collections budget. A smaller group of libraries were tasked with gathering all of the data they could get: usage, cost, impact factor, MIT editors, as well as the number of MIT-authored papers and cited references for each journal. The data came from a variety of resources, from their own budget commitments database to the local journal utilization report they purchased from Thomson. They analyzed the data and assigned points based on 4 performance values: cost/use, average subject ranking, MIT papers published, and MIT-affiliated editors. The highest performing journals scored a zero; the lowest performing journals received a four. Everything, from the raw data to the performance scores was presented to the librarians.

This study was used to identify cancellation candidates where further study was required, and not to make the final decisions. The process satisfies the data-driven needs of their stakeholders, allows for clearer explanations and communications, and encourages librarians to take a big picture view across all disciplines. Mathew also pointed out that there are challenges to serials collection reviews, such as cancellation limits set by publishers and the difficulty in comparing commercial vs. society publishers. Future plans include incorporating more of the Thomson data, looking at tools like Eigenfactor scores, and finding ways to incorporate ILL data into this process.

Getting the Biggest Bang for Your Buck: Methods and Strategies for Managing Journal Collections
Grace Baysinger, Stanford University [graceb@stanford.edu]

In her presentation, Grace took us on a tour of the various tools and strategies available to assess journal collections. Examples included data from ARL on library expenditures, the NSF science and engineering statistics, the *Library Journal* pricing survey that comes out every April, and the Federal R&D Project Summaries database (http://www.osti.gov/fedrnd/). Knowing about the programs you support and the key areas of research are also vital, and much of that information is readily available on department and faculty websites. Web of Science has the address field so you can limit your search for papers by campus or even a single department, and then analyze the results by journal title. She also mentioned Thomson's Local Journal Utilization Report as a tool to identify where your faculty are publishing and what they are citing. Along with publisher-supplied journal usage statistics there is also a report you can get from SFX for journal requests where full-text was not available.

Grace uses these tools for benchmarking her collection:

- Journal Citation Reports for a peer comparison: the number of titles for a subject, compared to what is held at Berkeley.
- Number and cost of all titles, and cost per journal. She uses the listed print subscription

cost.

- Impact factors, e-journal usage statistics, number of papers written by Stanford authors, number of times papers were cited by Stanford authors, and that SFX report.

She concluded her presentation with some thoughts on whether libraries are on the cusp of breaking the "Big Deal" packages, and where the threshold point is for that to happen.

Taking a Collection Down to Its Elements: Using Various Assessment Techniques to Revitalize a Library

Leah Solla, Cornell University [leah.solla@cornell.edu]

Leah opened her presentation with a review and update of the changes at Cornell that she first shared at the Spring meeting in San Francisco. The Physical Sciences Library facility was closed earlier this year, the print collection was dispersed, and the collections emphasis has shifted from print to electronic. Data analysis was as vital to the success of this transition as was user feedback.

She completed a very thorough analysis of what was being used, what was being used most heavily, and who was using the collection. More than 70% of the collection, including the bound journals, was relocated to their annex; the remaining print materials were sent to the engineering, math, and life sciences libraries. Leah focused on usage and cost per use for her serials review to cancel journals with fewer than 300 downloads per year, while using other data to identify new journals and backfiles that her users needed. While there is still an active core print collection (books, reference materials, reserves, and journal backfiles), acquisition of print materials have been greatly reduced due to budget pressures and to meet the greater demand for materials with online access. Along the way she discovered gaps in their online holdings that she is filling in with journal backfiles, e-books, databases, and online reference works.

Leah will continue to collect data regularly and rigorously, while also moving forward with patron-driven e-book acquisitions and experimenting with virtual shelf browsing.

After the presentations, the symposium concluded with an enthusiastic panel discussion where attendees and presenters asked and answered questions on variety of topics, including:

- Metrics, including ways to improve how we collect and analyze the data.

- Identifying return on investment (ROI).

- Patron-driven e-book acquisition models, which was a very hot topic based on the number of attendees who reported their libraries were planning or already working on a pilot.

- How to make these resources discoverable and accessible for our users.

This was a well-attended and well-received symposium, and the SLA Chemistry Division looks forward to hosting the next joint DCHE-CINF symposium.

(*The author thanks Norah Xiao for proofreading and comments.*) ❖