It is a distinct double honor to be here today – not only to be presenting in a symposium for one of the pioneers in our field, but also to be representing a history of library service evolution at Caltech, Dana’s home institution for almost 50 years. I would also like to acknowledge my co-authors, the other subject librarians at Caltech, who also have the pleasure of working with Dana.
A little bit about Caltech and the Caltech Library - we are an AAU member but not an ARL member. So, it is of note that we are a fairly small collection, and we focus on the current needs of our researchers and not so much on building a collection of record, and I’ve talked about those challenges at a previous ACS meeting. Of note though is that our electronic/print split does mirror most research institutions.
In thinking about the different areas of library service evolution and connection, it was hard to arrange them linearly to fit into a linear talk. In consultation with my colleagues, three main areas up for discussion in terms of services are collection development, discoverability, and information retrieval, and I’ll talk about how our approach to each of these has evolved at Caltech. Ultimately the overriding concern between them is the user interaction with each of these things. And the “user” in our case is primarily Caltech faculty, students & staff, but at the end I’ll talk briefly about how this expands to the world outside of Caltech – both in terms of the world accessing our materials, and how we work with one particular database for both our campus’s benefit and the database’s benefit.
Historically, reviews of new books for potential collection came from reviews in scholarly journals, and then eventually aggregate review magazines aimed at libraries, such as Choice. Today, aggregator services such as GOBI allow for viewing a wide range of titles available for purchase, as well as reviews when available. Sort of a one-stop shop if you will for collections librarians.
However, these services, like any, are imperfect – once in a while important titles may get missed due to omission in these venues, or simply overlooked by the sheer volume of new work being published. At Caltech, patrons can suggest titles to be purchased, and Kristin and I have recently implemented an “Amazon-like one-click” form with newly published titles that we don’t deem as automatic fits for our collection, but want to make patrons aware that they have been published, and will purchase them on request. Of course we have always taken donations of appropriate materials.
So, now that we are acquiring titles, how to we tell people what we own? This is part of a three page list (three!), organized by author, of books in the chemistry library. (I’m not sure when the Dewey numbers were added.) This was the earliest catalog I could find from the Chemistry library.
Updates were also issued periodically – this is an excerpt from an update list of books added between October 1925 and January 1926, and it was about one page of titles, about 30 or so. We’ll see later just how much times have changed!
When Dana came to Caltech as a librarian, one of his first projects was to organize the chemistry collection and make things findable. One way he did this was looking at books and journals, and noting where there were chapters of specific interest, or special journal articles or journal issues. We still have some of these custom indexed items in our catalog, along with Dana’s custom guides.
Of course, all the technology in the world doesn’t substitute for the actual physical interaction of seeing something, picking it up, and leafing through it. New books and journals displays have been a part of the library for a long time – this image is from the old Engineering Library. Today, we try fun things like putting our carts outside on nice days, and we’ve seen a major uptick in stuff checked out. However…
Really, we all want this – this is a digital display wall at the Hunt Library at NC State. It’s awesome. And it speaks to a growing need of how to display and market ebooks, a problem we at Caltech, like many libraries, are struggling with. If you have any good ideas, please contact us 😊
In the meantime, some of our electronic avenues are pages and RSS feeds alerting people to new materials each month, including specific categories such as ebooks. A new list that I worked with our Cataloging people to implement is a weekly new (and updated) materials list. Note that 104 items were added or changed in the last week, compared to the 30 items added over the course of 4 months that we saw earlier. This was designed for a very specific purpose...
..which was to continue and expand upon Dana’s department newsletters. These would alert the division to new books, journals, and other changes and news of note related to the library. However, given the amount of material we acquire and the amount of news to communicate, including weekly instruction classes which I will touch on in a little bit, weekly emails seemed more timely. So, with the Cataloging-generated new materials list in hand, the Department Newsletters were relaunched with embedded HTML, providing instant access to ebooks and webpages. And although a fair bit of work, this has garnered very positive feedback.
When we look at retrieval “technology”, initially one could say it was up to the individual user to go into the library, use the discoverability tools available (i.e. the aforementioned card catalog), and find what they needed. Here we see patrons in one of the old campus libraries, and Dana himself in the Gates Library looking through Chemical Abstracts. Caltech, like many academic libraries, had many different branch libraries across campus, which were consolidated in 1966-1967 with the opening of the Millikan central library.
Once Millikan opened and provided a central repository for books and journals, many duplicate print subscriptions were cancelled. The “DocuServe” Document Delivery Service was started in 1967 with the acquisition of a Xerox machine. Patrons could request photocopies of journals held in Millikan be delivered to their office for a small fee. This proved to be one of the most popular library services to date. In one sense this is analogous to the beginnings of the Internet – distribution of information from a central repository. This was also part of the beginning of the library providing more specialized services. Throughout the 70s and 80s, with the advent of computers and nascent network communications, librarians used database services after hours to conduct searches for patrons, usually taking advantage of after-hours academic rates.
Campus-wide ethernet came to Caltech in the early 80s. This led to the swing back towards users doing it themselves. TOC/DOC stands for Table Of Contents/Document Delivery, and was the result of integrating the ISI SciSearch database with Caltech’s local journal holdings, something in which Dana was instrumental in developing. It was very well received as shown here, and was the beginning of the shift back towards user-performed searching.
With the proliferation of PCs and broadband/wireless internet, this has led to a proliferation of user-centered search tools, putting the technology and control back into users’ hands. However....
...with all of these services, how do we teach others how to use it? How do we communicate to people that there is more to life than Google, and how to use better, more specialized tools to get them the information they need? Traditional reference desk interactions and phone calls – synchronous interactions – are augmented by asynchronous communications such as emails (at all hours of the day – or night). As reference librarians, we focus on fast turnaround and response time, harkening back to the days of DocuServe and mediated searching.
In addition to one-on-one service, we teach classes, with the Chemistry ones being historically popular and still to this day among the more well-attended classes. Dana developed and taught many of them, changing and adapting with the tools themselves to best keep users informed on the best ways to use them. We have also started expanding this to research group visits and course-embedded instruction. Of course, in addition to synchronous in-person support, the Internet Age has allowed us to provide asynchronous support in the form of websites, posted handouts and guides, and the like.
Our facilities, which include a Conference room and a Computer classroom, are available for the entire campus to use. Here’s a demonstration being given to library staff in the Multimedia Conference room by James Malony and Julius Su, who run the Community Summer Academy for high school students here at Caltech, and they use library facilities pretty extensively. The classroom on the right has three Apple Air-equipped monitors, and eight dual-monitor workstations on moveable tables.
We monitor campus publications cited in Web of Science and report errors back to
them to improve their records. We also use the citations to populate our Institutional
Repository, the Caltech Collection of Open Digital Archives (CODA). Faculty love this
and use lists for their webpages. CODA recently added it’s 40,000 publication and
continues to grow in popularity. It includes journal papers, campus reports and
publications, and PhD theses, for which we frequently get requests from all over the
world to make them publicly accessible, if they are restricted.
Finally I’d like to thank the Caltech Archives, the Library, and Dana Roth. We are compiling a complete list of his publications in CODA, and will also be releasing his oral history later this year.

On a personal note I want to say what an amazing privilege it has been to work with Dana – it is very rare indeed you get to be mentored by the absolute foremost person in your field. Although it was a difficult decision on a number of levels to leave UF, this is truly a phenomenal opportunity, and the more I work with and get to know Dana, the more I relate to his philosophy on librarianship and am impressed by his dedication to the field. As a latecomer to the field, working with him has really made me feel like I’ve finally found my calling after many years in the wilderness.

Thanks to you all for being here and thanks of course to Dana! 😊