Discovery, a New Way of Searching (Thinking): The Challenges, Trials, and Tribulations

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**Discovery, a New Way of Searching (Thinking): The Challenges, Trials, and Tribulations**

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**Abstract**

Google and like search engines have changed the way library users search and retrieve information. The typical library user has come to expect discovery or other search tools to provide one-stop (one-box) searching with seamless and immediate results. While our students and faculty are traveling on this new discovery highway, not all of our library faculty and staff have made it to the on-ramp for this new approach of searching (Thinking).

**Introduction**

Libraries are moving forward from silos to a more fluid, single interface. The Integrated Library System is no longer the end-all when it comes to the type of searching library users have come to expect. Library users walk around with computers and Internet browsing capabilities in their pockets; they have come to expect a one-stop search shop. As librarians, we balance the need to provide research our users need using search tools that are easy to operate, and are applicable for all types or levels of research. Discovery layers provide a starting point for users that return a variety of resources. These new discovery tools provide rich and diverse opportunities for library users and research (Fyn, Lux, & Snyder, 2013).

Jody Condit Fagan has noted that a single search box or tool is not the ultimate goal of the library (Fagan, 2012). It is important to keep in mind that a discovery layer is just one more tool in the librarian’s toolbox; it is not the only tool. Library users should be mindful that entering terms into a search box is simple and easy. Searching, however, is not a simple task; it is a complex task that requires skill and specialized focus (Badke, 2014).

In general, libraries began the discovery journey years ago with the implementation of the federated search. Due to the large amount of data returned in search results and other factors, this tool for many libraries was found unreliable. At times it did not provide results users needed, provided too many results to evaluate, or took too long to return the search results. Through innovation, new tools Marshall Breeding labeled “discovery interfaces” began to emerge in the 21st century. These discovery interfaces would help library users discover content in all formats, whether it is physically in the library or available through an electronic content database provider (Breeding, 2010).

These discovery interfaces are inevitable next steps as libraries break down the silos of library resources. As such, it is important that public services librarians be familiar with and take a proactive role in the utilization of the discovery interface, so they can readily address users’ questions and concerns (Kornblau, Strudwick, & Miller, 2012).

**The UAB Sterne Library Experience**

The University of Alabama at Birmingham (UAB) is a fairly young academic institution with a long rich history as a medical institution; established in the 19th century as the medical school of the University of Alabama. UAB began as an academic extension school in the mid-20th century through 1969 when the University of Alabama system was established, and three autonomous campuses were named. UAB is an urban campus, with an FTE of approximately 14,500 and a diverse user population. The University is home to three libraries: Mervyn H. Sterne Library, the academic library; Lister Hill Library of the Health Sciences; and Reynolds Historical Library. As the academic library, Sterne serves all of UAB and must be ready to meet the research needs of our users.

For several years, it has been the goal of the UAB libraries to provide access to all library resources

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from one interface. Currently, Sterne Library and Lister Hill Library maintain two separate legacy integrated library systems. Sterne Library migrated in the late 1990s to self-hosted Ex Libris Voyager and Lister Hill to SirsiDynix Horizon. The question we face is how can UAB libraries move from silos of information to a tool that would appear to seamlessly provide search results from multiple sources.

Early in 2009, when discovery implementations were just beginning to develop, we received information about an offer from OCLC providing the opportunity to implement WorldCat Local “quick start” (“WCL-QS”). This abbreviated discovery implementation was provided at no additional charge with a WorldCat on FirstSearch subscription. At the time of this release, Sterne Library had experienced a significant reduction in our annual budget; and in that same year, the Alabama Governor declared two separate instances of proration. As a result, we were charged with providing innovative tools without incurring additional cost. The OCLC release of WCL-QS provided Sterne Library with a multifold opportunity; through it we would be able to provide a new tool for UAB users to search library resources, as well as provide an opportunity for us to learn how to implement and work with the “new” discovery technology. Most significantly, it was a way to begin building information bridges.

Like many academic libraries, Sterne had implemented one of the older federated search engines. Our federated search, however, never seemed to work as it had been intended. As such, we had considerable concerns about the new discovery technology and anticipated that the technology would present several challenges. We were unaware; however, the extent to which this would be a challenge to some of our users.

With a contract for WCL-QS signed and in place in the summer of 2009, we began our discovery journey. A soft roll-out of Sterne Library’s WCL-QS took place in the fall of 2009 with an “official” announcement released early 2010 in conjunction with the rollout of the library’s new webpage, and a major Voyager upgrade. Library users were encouraged to use the single “Google-like” search tool to explore UAB Sterne Library and libraries of the World (Kain, 2010). Not only were we introducing a new tool, we were also introducing a new way to search library resources. In conjunction, we began to look at cataloging functions and other traditional work flows; realizing we would need to rethink and reevaluate some of these functions. We opened the door to change, moving away from our library silos to a shared library research environment.

One of the greatest challenges we faced as we began to work with and introduce this new library tool was gaining acceptance of library staff. Unfortunately, in many cases there is more emphasis on the technical journey than promoting staff acceptance and understanding, and our journey was no exception. Working with the one-search box, we discovered hiccups in our local catalog; some were ghosts from systems past, while others revealed the differing philosophies among Sterne catalogers in the creation of catalog entries. The technical issues seemed to build up the walls of staff resistance; when the discovery interface produced more errors than successful searches, users were unwilling to use it.

We determined the biggest technology challenge we faced centered on the format of the OCLC numbers; some OCLC numbers in the catalog record contained a prefix of “ocn/ocm” while others did not. WCL-QS provided us only two options when searching the local catalog; both options were left anchored searches one with the prefix and one without. As our records were evenly mixed, either setting produced a fairly high error rate; this became our major stumbling block for success. At that time after several long discussions with systems and cataloging representatives, it was decided we would handle standardizing the OCLC number format in the local catalog for the approximate 1.2 million records ourselves; so we set out on a journey to create a way to tackle the problem. Not resolving this issue quickly created more strain between the systems staff and the public services staff. After some failed attempts we finally developed a systemic strategy that worked within the code parameters of our integrated library system that would successfully add the “ocn/ocm” prefix to the 035 field in each record. While this did not completely
resolve the issue it did correct a significant portion of the catalog records and standardize the OCLC number entries.

With most of the challenges resolved, we moved more to one-on-one conversations with library staff. We spent days with individual subject librarians walking through endless searches, answering questions, etc. Some of these conversations were at times rather heated as librarians were frustrated working with the new technology, especially when this new technology did not operate the way it was expected to work.

Significant progress had been made in the manual cleanup of our catalog records, so a decision was made to migrate to the paid version of WorldCat Local with the additional features. Migration to the full resource was rather uneventful.

While our local catalog cleanup was not complete, it was agreed that a full batchload project would be the next course of action. Before submitting our records for a batchload project additional internal decisions and evaluation was necessary. An item count was pulled by location code. A cataloging decision was made many years ago by Sterne cataloguers to use the location code to provide granularity regarding the item type. As such, our location codes are a mix of item types and physical shelf locations. Some location codes in the local catalog are vendor designations for electronic resources, some are temporary shelving locations (e.g., “Course Reserves”), and some are a mix of the physical description as well as the physical location (e.g., “Rare Book Oversize – Horizontal”).

An additional piece of the puzzle related to electronic resources. For some of our electronic resources we have purchased vendor MARC records and per the license agreements are restricted as to what we can do with the records. Depending on the restrictions, those records and record locations were eliminated from the batchload submission. As we worked through the location code process, we continued to identify more issues we could easily resolve by hand; thereby completing additional presubmission clean-up of the records. All in all, this was a tedious technical process that actually worked to our advantage.

In early 2013, we submitted approximately 1.2 million records to OCLC for our full batchload project. The initial run of our records, matched first using the OCLC number and additional filters of authors and/or title. Out of the approximate 1.2 million records approximately 5,200 were reprocessed; matching only on the OCLC number without the additional filter of author and/or title. Of those records that were reprocessed, we received two files totaling 560 records which had to be addressed by the catalogers. While waiting for this process to be completed and the records overlayed in the local catalog, work on the knowledgebase began. In anticipation of the migration to a paid discovery product, we had already identified the electronic resources that UAB had access to, based on license agreements. Thus, building the knowledgebase that would support the discovery implementation was a fairly easy though a time consuming process.

With the standardization of the OCLC numbers and the cleanup of catalog records completed, we moved forward to our next step to setup question driven vendor training sessions. It appeared that we had at long last moved forward beyond just addressing the broken parts and could now focus on building search techniques. We setup multiple times/days/sessions for the live training (“WebEx”). All library staff were encouraged to attend; the content of each session while providing some standard information was driven by the library staff in attendance. Prior to each training session, an email was sent to all library staff encouraging them to send in comments, questions and/or concerns they wished to have addressed in each session. The vendor/trainer specifically addressed the questions and answered others that came up during the session. All sessions were recorded and links to the recorded sessions were distributed to all library staff. Our discussions did not end with these training sessions as one-on-one conversations to address staff questions and concerns continue to this day.

Search results became a major point of contention for some of the library staff; some staff felt it was imperative that users had the ability to search the
same way they searched the local catalog. Fortunately, staff members from the cataloging department were able to provide valuable insight regarding specific search parameters. Using Connexion and comparing results in the discovery layer, provided library staff with a better understanding of the index in place, how the subject headings were being indexed and resolved. Through these discussions, we were able to determine that this new resource was actually employing modified search algorithm. Understanding the how and why seemed to help some library staff users as they moved forward from the traditional way of searching to this new way of thinking. By relating this new technology to the more customary library tools, library staff appear to be more willing to try this “new” way to search. It is no longer “broken” but just a new twist on something they are familiar with using.

Conclusion: Moving Forward

As we continue to work with a discovery interface, our current technical challenge is setting local holdings information for serial records. In the early years, Sterne Library was a part of a Union List of Serials project and local holdings were added for participating Alabama libraries to OCLC through SOLINET (n.k.a., Lyrisis); SOLINET was at the time the OCLC regional provider. When the project was discontinued, Sterne made the decision not to continue contributing local holdings to OCLC. Unfortunately, this means that we have not provided serials holdings in our catalog records that can be seen through a discovery interface; as such, the user cannot tell what specific volumes are actually held. To correct this going forward, for new serials records, we have begun to add local holdings. For those serial records already in the local catalog, we are still in the process of formulating a plan of action. Our goal is to submit catalog records for an OCLC local holdings batchload project within the next twelve months. Completion of a local holding maintenance batchload will improve discoverability and allow additional granularity for ancillary services such as Interlibrary Loan.

Conversations among library staff members are continuing; and there appears to be more understanding and acceptance about moving to this new way of searching and thinking. That being said, like all libraries, there are still a few library staff that will not go willingly into this new discovery environment.

Sterne and Lister Hill are currently undergoing several administrative changes which will have a significant impact on the technology the libraries implement in the future. We are in the process of merging into the UAB Libraries and the first Inaugural Dean of UAB Libraries has been appointed. We have just begun the process and do not know where it will lead. Eventually, one integrated library system will take the place of the two. Once that happens, the choice of the integrated library system vendor may determine what discovery tool, if any, is selected and implemented.

We have had the experience and gained expertise in having built a knowledgebase and implemented a discovery tool. We have identified issues; some have been solved and we continue to work through others. The records in our local catalog have been cleaned up; we have procedures in place to prevent inconsistencies with ongoing cataloging. This has also provided additional opportunities for ongoing discussions among library staff.

This has been a worthwhile learning experience for everyone and our migration to a new integrated library system and other library tools will be much easier as a result of our work and this experience.

References


