Encore Implementation: team results

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Syracuse University

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ENCORE Implementation

Team Results

Terriruth Carrier and Bobbi Gwilt
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Introduction
Syracuse University Library, in conjunction with Moon Library (SUNY Environmental Science of Forestry) and Barclay Law Library, searched for the Next Generation Online Patron Access Catalog (OPAC) that would work with the current Voyager OPAC. After doing an extensive search, the team found that Innovative Interfaces had the product of choice. The Innovative Interfaces product, ENCORE, met most of the requirements and was within budget. We anticipated that we could handle the implementation work with local resources. We knew our local resources were stretched in numerous directions. We needed a vendor who could do much of the work for us and would be willing to work in collaboration with us on the aspects unique to SU to ensure that our service goals would be met with this product.

March 31\textsuperscript{st}, 2009 the contract was signed by both parties. Innovative assigned Luis Cosmes as vendor team Project Manager with Terriruth Carrier was assigned as Project Manager from Syracuse University.

Established Teams
There were two primary teams, one at Innovative Interfaces and one at Syracuse University.

Syracuse University Project Team
The team represented all functions from the University Libraries. The roster follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Bobbi Gwilt</td>
<td>Associate Dean</td>
<td>Sponsor</td>
</tr>
<tr>
<td>*Sarah Theimer</td>
<td>Cataloging</td>
<td>Chair</td>
</tr>
<tr>
<td>Sean Quimby</td>
<td>Director Special Collections</td>
<td>Special Collections</td>
</tr>
<tr>
<td>Lesley Pease</td>
<td>Head Learning Commons</td>
<td>Learning Commons/Students</td>
</tr>
<tr>
<td>Linda Galloway</td>
<td>ESF Librarian</td>
<td>ESF</td>
</tr>
<tr>
<td>Andrea Rabbia</td>
<td>Law Librarian Technical</td>
<td>LAW</td>
</tr>
<tr>
<td>*Merritt Lennox</td>
<td>LITS Business Systems</td>
<td>Information Systems Data and Integration</td>
</tr>
</tbody>
</table>
Scope
The initial scope of this project was the following:

Determining Software Rules and Functionality
- Keyword Search Engine with RightResults advanced relevance ranking
- Keyword spell check capability
  - Note: Currently, we are questioning if this is working well. Innovative Interfaces is looking into this and may enhance this in future releases
- Facet search by collection, format, date, language, location
  - Note: More facets have been added to our installation as well
- Added functionality such as Call Number Facet and Disability accessibility
  - Disability accessibility is working
  - Call Number Facet is not working as expected but we will continue to work with Innovative Interfaces to reach our goal
- Recently Added Feature
• Tags
• Community contribution
  o Note: We chose to turn this off based on a concern that patrons would consider community rankings a Library endorsement.
• Library branding and limited visual configuration

Determine Software Integration
• Easy navigation between ENCORE and Metalib
  o Note: This is substantially different than envisioned, but it is working.
• Integration with link resolver products
  o This works but needs more attention. We plan to set up an internal sub task force to continue working on this.
• Set up and Integration with SFX for the Explore screen
  o This works but needs more attention. We plan to set up an internal sub task force to continue working on this.
• ENCORE harvesting from OPAI-PMH database
• We have been harvesting Content DM records and can continue to harvest other suitable records as these are identified. Simultaneous search of Metalib
  o Because Metalib is remotely hosted, this functionality has not happened. This is a heavy lesson learned – ensure that the vendor understands how you are using other vendors’ products before assuming interoperability between two vendors’ products will work.

Determine Hardware Setup, Configuration, Integration and Testing
• Multi-tiered architecture design with dedicated ENCORE server
• Accessibility for disabled persons
• Integration with local backup systems
• Setup and loading of software on the ENCORE owned PC
• Set up ENCORE PC with local Network

Communications
• Internal to Library Staff through:
  o Dean’s Team
  o Library Wide Emails
  o LibGuides
  o The Kickoff Meeting with Innovative Interfaces
• External to Faculty and Students through:
  o News on the website
  o Feedback on the Website
  o Articles in the Daily Orange
  o Press Releases
## Schedule of Events

<table>
<thead>
<tr>
<th>Resp.</th>
<th>Name / Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCORE</td>
<td>Network Requirements</td>
<td>April 2009</td>
</tr>
<tr>
<td>ENCORE</td>
<td>Logo and Branding requirements</td>
<td>April 2009</td>
</tr>
<tr>
<td>Library</td>
<td>Rules and configurations for the ENCORE System</td>
<td>May 2009</td>
</tr>
<tr>
<td>ENCORE</td>
<td>Server loaded with software</td>
<td>June 2009</td>
</tr>
<tr>
<td>ENCORE</td>
<td>Installed Server to our Network</td>
<td>June 2009</td>
</tr>
<tr>
<td>ENCORE</td>
<td>Training on Server and Backups</td>
<td>June 2009</td>
</tr>
<tr>
<td>ENCORE</td>
<td>Training to Team on how to use ENCORE</td>
<td>July 2009</td>
</tr>
<tr>
<td>Team</td>
<td>Kickoff to the Library was July 28th</td>
<td></td>
</tr>
<tr>
<td>Team</td>
<td>Documentation for Users</td>
<td>Aug 2009</td>
</tr>
<tr>
<td>Team</td>
<td>Need to continue to improve this</td>
<td></td>
</tr>
<tr>
<td>Team</td>
<td>Some Access Service people have created LibGuides for their patrons.</td>
<td></td>
</tr>
<tr>
<td>Team</td>
<td>Training/Presentation to Librarians and Staff</td>
<td>Aug 2009</td>
</tr>
<tr>
<td>Team</td>
<td>• Kickoff Meeting by Innovative Interfaces</td>
<td></td>
</tr>
<tr>
<td>Team</td>
<td>• Nancy Turner gave multiple sessions</td>
<td></td>
</tr>
<tr>
<td>Team</td>
<td>• TC Carrier gave multiple sessions</td>
<td></td>
</tr>
<tr>
<td>Team</td>
<td>Results from Summer statistics</td>
<td>Sept 2009</td>
</tr>
<tr>
<td>Team</td>
<td>While we have AWSTATS, an open source Web analytics reporting tool, suitable for analyzing data from Internet services, we also have enhanced our statistics with Google Analytics.</td>
<td></td>
</tr>
<tr>
<td>Team</td>
<td>Results from comparison of Usage F2008 to F2009</td>
<td>Feb 2010</td>
</tr>
</tbody>
</table>

### Innovative Interfaces and Syracuse University Relationship

While ENCORE was a product selected to minimize decision-making needed before implementation, there were still important decisions to make. We expected that Innovative Interfaces would be a partner and help us with these decisions as well as explaining the pros and cons found by other installations. We found that Innovative
Interfaces had not yet handled a customer similar to us, who wanted a “highly interactive relationship”.

**Innovative Interfaces Perception:**

The Library tells them what to do; Innovative does as instructed and implementation is quick and efficient.

**Syracuse University’s Perception:**

The Library needs to ask questions. We need to understand in detail where Innovative is pulling the data and how the data will be used before making decisions. We do not always use the information in each of the MARC fields as “designed” nor do the three libraries employ consistent procedures with MARC records. Our Voyager system has been locally customized and is not a simple off the shelf system; thus we need a vendor who will be a partner rather than a straight forward implementer.

These two perceptions caused some misunderstandings and conflicts. The project manager at SU had to raise the flag numerous times to the senior managers at Innovative Interfaces. However, during implementation, they simply didn’t understand the problem or impact of this problem. When the Senior VP, Neil Block, actually came to SU, after implementation, the differences in perceptions and the consequences of those differences became clear to all parties.

Syracuse University’s persistence in this matter paid off but this was a serious time demand for the team, especially the project management team. Weekly phone meetings took place with numerous repeat conversations before the Innovative team could grasp, understand and appreciate the situation.

In the end, we have helped make the ENCORE product a better product for Innovative and for us but development issues still remain. However, we have a better understanding of how to suggest improvements and Innovative has an attitude of partnership instead of implementer.

**Decisions Made**

While a majority of the ENCORE product is ‘canned’ (e.g. ready to go, as is), there were features that needed to be defined by the team. This section will discuss those features; how those decisions were reached and the final outcome.
Sample Database
We decided not to load the whole local database (SUMMIT) but instead to load 10,000 bibliographic records with the corresponding holdings records. This sample load included serials and monographs. We also loaded 2000 patron records. With the sample loaded into the ENCORE system, we could see how it would look and where we might have potential problems. We knew that loading the entire database (SUMMIT) would take at least one week and possibly two.

The team gave Merritt a list of records representative of all different types of conditions to provide at least one or two records for every possible condition. Additionally, Merritt took records from every Library of Congress classification code to ensure comprehensive representation within the database of sample records. This resulted in almost 15,000 bibliographic records.

Creating the sample database, took much longer than a week, with many trial and error loads on both sides. This did allow Merritt to refine his process prior to working on the full load. Unfortunately, when everyone was reviewing this work and testing it, they forgot that it was a sample and the frustration level began to get high right away. The team was anxious to show it off to people but since there were only a limited amount of records, the full system was not working to its full potential. This was misleading and did not give us a good understanding of what we had or how our data was indexed and displayed. Those not directly involved were unclear as to what they were seeing and why they were seeing it. This was bad publicity for the ENCORE tool from the start.

Lesson Learned: Keep system testing to a small group that fully understands what they are seeing and why. Don’t open it up to the world until most of the kinks are worked out. If the new discovery/delivery tool has a difficult start it is hard to discount later on and correct this impression even when the problems are resolved.
Select URL
We selected discover.syr.edu to make the name meaningful; this cover of the OPAC was a DISCOVER skin. We felt that the patrons would not understand what ENCORE was or meant as the word doesn’t have anything to do with search engines, online catalogs or the like. We felt this was not a big decision since most people would not be typing in the URL but would be getting to the site via a link from the Library Website. We did look at other Library sites using ENCORE and found that a significant number of sites used Discover as well as ENCORE.

This decision was made very early on because it was required by Innovative Interfaces for their work.

After we decided to call it http://discover.syr.edu, we started branding it internally as the Discover Tool. We used the name externally to assist with troubleshooting. Remote users can identify the screen or page they are on and ask for help. A Logo was developed with the word DISCOVER on it.

Facets – Location
Facets were a major focus of attention. Three of the most important facets were Location, Collection and Format. We developed local definitions for each of these facets.

The Location Facet was defined as the physical building housing the collection. The patron would be able to click on this facet when they were in BIRD and see only those titles that actually exist in BIRD. This was thought to be an easy facet to define and would be taken from the existing location code in MARC record for holdings (MFHD).

OK, this was not so straight forward. The location of the title is not always found in the MFHD. This fact tripped up Innovative Interfaces. First, if an Item Record exists and has a location code, that is the location information needed. If the item record location is blank, then the MFHD location code would provide the location information needed. Because Innovative Interfaces does not work extensively with the Item Record, Merritt had to write the code to populate this facet information. (Locations change as the libraries change; Appendix A has the listing relevant as of November 2009)
Facet – Collection

The Collection Facet is defined by a dimension that is neither the physical location nor the format, e.g. content container. This facet uses the MFHD Location field as well but is mapped differently. The breakdowns are more finite and are based more on the nature or the intent of the collection rather than location. Merritt had to write code on this facet as well. (Note that locations change as the libraries change; Appendix B has the listing relevant as of November 2009)

Collection Rules:

a. Collection Rules given to Innovative Interfaces

- Atlases/ Maps
  - Bib leader Byte 06 type = e

- Belfer Audio Archive – includes all materials in Belfer: sound recordings (78, 45, 33 1/3, etc), print monographs, print serials, digitized sound (e.g. the cylinder collection)
  - Location that has ‘belf’ in it using only the MFHD holding location

- Government Information
  - Bib 008 character position 28 if contains any value, then this is a GPub

- Images – includes all types of static images: photographs, slides, posters, images from ContentDM, Images from ArtStor. Pictorial or non-textual content that is “static”, not dynamic.
  - Bib leader Byte 06 type = k
  - AND Location that has fa,slid using only the MFHD holding location

- Internet
  - Location with inet anywhere in location code, using only the MFHD holding location

- Journals -- print & electronic; serial, periodical, annual, all frequency intervals. Broadly defined.
  - Bib leader Byte 07 BLvl = s or i

- Law collections (5 additional collections identified) All defined by MFHD Location
  - Law- NY State Law Collection
  - Law College – Office of Career Services
  - Law College – Office of Clinical Programs
  - Law- Law Reviews

- Reference
  - Location with ref in item record temporary location first, then item record permanent location and
  - then MFHD location.
o OR MFHD: MARC 852 |m text "does not circulate" is present
o OR MFHD: Location has 'inet' and Bib 6XX has 0 in subfield |v or |x with the following text values:
Need text values here

- Reserves
  o Location with ref in item rec temp location first, 2nd item record perm location, 3rd MFHD location.
  o See spreadsheet : for the specific locations
Need more here – list of codes for reserves

- Special Collections
  o Location with spec in MHFD location; see spreadsheet for specifics.

- Thesis/Dissertations – includes microfilm, print, produced at SU, ESF, or purchased from other universities, e.g. Law has dissertations from Harvard, Yale, etc.
  o Bib field 502 if present then this is a thesis/dissertation

- Video – includes all types of moving images: 16 mm film, DVD, VHS, Blu-ray. Pictorial or non-textual material that is dynamic, not “static”.
  o Bib leader Byte 06 type = g
  o And not location mfhd = fa,slid

- Newspapers
  o position 21 in the 008 has value 'n' for newspapers
  o and combine with BIB level 07 leader s or i

b. Took University Press out of Government Information

c. Priorities: Least to Most (Need explanation of this)

There are times when an item will belong to multiple categories within the facet. However, ENCORE only allows a one-to-one association, not a one-to-many. As a result, we had to come up with a way to prioritize which category we wanted to take precedence over other categories in this case. Merritt suggested a priority system where we ranked the facet categories by least to most. The higher up on the list then the greater precedence it took. So if the item is in Government Information and part of the Law-NYS Collection, it would be found under Law-NYS Collection because Law-NYS Collection is higher on the list.

- SU Abroad Centers
- Government Information
- Theses and dissertations
- Images
- Videos
- Internet
Facet – Format
The Format Facet is defined as the container/delivery system. It is primarily from the format field in the Catalog but there were exceptions for government documents and theses. The big decision in formats was agreeing on a label meaningful to the patrons. This was difficult and continues to be a challenge.

We were also concerned about having the same label in two facets, e.g. video in the collection facet and in the format facet. Would that cause confusion or would different patrons look for the same thing but in different places? Should the label mean exactly the same thing in both facets or could one be a subset of another? These were the challenges the team faced and handled. We decided that the same label should have the same meaning and identify the same set of items for each facet. (See Appendix C)

Facet rules:

• Archive/Manuscript
  o Bib leader Byte 06 type = t

• Atlases/Maps
  o Bib leader Byte 06 type = e or f

• Books
  o See spreadsheet for format

• Images – includes all types of static images: photographs, slides, posters, images from ContentDM, Images from ArtStor. Pictorial or non-textual content that is “static”, not dynamic.
  o Bib leader Byte 06 type = k
  o OR Location that has fa,slid from MFHD holding only location
• Internet
  o Location that has 'inet' anywhere in location from MFHD: MARC 852 |b holding only permanent location
  o Law, elec MARC 852 |b permanent location

• Journals - Electronic
  o Bib Leader 07 BLvl = s or i
  o And MFHD: MARC 852 |b location has string inet

• Journals - Print
  o Bib Leader 07 BLvl = s or i
  o And MFHD location is NOT string inet

• Microfilm/microfiche
  o Bib 008 Character 23 must be equal to 'a' or 'b' or 'c'
    law, mic for microform for law

• Scores
  o Bib leader Byte 06 type 'c' or 'd'

• Sound recordings – musical
  o Bib leader Byte 06 type 'j'

• Sound recordings – spoken word
  o Bib leader Byte 06 type 'i'

• Video – includes all types of moving images: 16 mm film, DVD, VHS, Blu-ray.
  Pictorial or non-textual material that is dynamic, not “static”.
  o Bib leader Byte 06 type = g
  o And not location mfhd = fa, slid in MARC 852 |b permanent location

▷ Priorities: Least to Most

There are times when an item will belong to multiple categories within a facet. ENCORE only allows us to put the item into one category. Merritt suggested a priority system to rank the categories in the facet from least to most. Greater priority is given to categories higher on the list. So if the item is a kit and a map, it would be categorized as a map, because maps have greater priority over kits.
  ◦ Books
  ◦ Databases
  ◦ 3D objects
  ◦ Kits & mixed media
  ◦ Software
Lessons Learned: More catalog standardization is needed among ESF, LAW and SU libraries. The difference in practices and procedures among the libraries caused many problems when attempting to apply the same discovery tool. Cataloging practices have diverged over the years and need to become more standard and consistent to enable the use of external software packages for more efficiencies and improved discovery in the future. To use the same tools effectively, we must come closer to consistent shared standards or we will not achieve the best level of service to users.

Harvesting
Content DM is a major resource of digital materials that we want to make more visible to our patrons. ENCORE was able to acquire the ContentDM metadata records through their harvesting feature. Initially we thought that all the ContentDM art images would be searchable through this harvesting. We found that some of the art images were under copyright and could not be made available publicly. We reviewed the ContentDM collections to determine what artwork was licensed/owned by Syracuse University and able to be “seen” by our patrons and what was not in public domain. The art collections were separated by differences in copyright status; the publicly available images in Content DM were then harvested and the rest remained available only through EZProxy authentication.

Lessons Learned: In this case we learned two lessons. One lesson was that we need to know who has key knowledge, not only from a technical point of view, but also from legal point of view and user point of view. We had many false starts because we did not go to the right person, the expert with critical knowledge, initially. It took time to track down the right person with that knowledge to help us solve the interfacing problems and other issues between Content DM and the harvesting tool provided by ENCORE.
And that is the second lesson learned. We need to understand the legal ramifications of all of our materials: who has ownership and what is the status of the material under copyright law and the provisions of “fair use”. In this particular instance, we brought in Kevin Dames who helped us sort through the details and gave assistance in handling those legal issues.

**Federated Search**

Our federated search is the product Metalib, which is hosted by Exlibris. Innovative Interfaces was emphatic that they were compatible with Metalib, had worked with them and integrated that product with their own product.

Working with Metalib/Exlibris was a challenge. Exlibris was not willing to work with Innovative Interfaces to give them certain requested information. As a result, Innovative Interfaces was not able to integrate the Metalib results into the main results from the catalog search. Innovative was able to add a link on the page and push the search with the existing search term to the Metalib product to conduct that same search. This came after many weeks of questioning, pleading and harassing Exlibris and Innovative Interfaces to work with each other.

Initially we designed a data path that had Innovative Interfaces passing the search term to a point in Metalib where the patron could select their own databases to continue their search. After examination and input from the WebTeam, we changed this to passing the search term to the Quick Set databases and then going directly to those results.

What we have is workable and livable. We could enhance it and we would like that done in the future.

**Lessons Learned:** Question the vendors in detail to ensure that the vendor-to-vendor connection will work; specific technical information needs must be well understood by all parties that are expecting to interface and share, receive/send, or exchange data. The second lesson learned was again, we need to know who is responsible for each technology product and who will be the main users of the service. When we have a question we need to know the right person to ask.

**Enterprise Backup**

The Enterprise Backup software was a separate product and initially, we did not realize this was actually a different product, distinct from ENCORE. Russell Silverstein negotiated with the Innovative Interfaces team to ensure we were fully covered with no extra costs. The biggest problem hosting a server that did not belong to us but would
be residing on our network was setting up the ENCORE Server on our network and incorporating the backup into normal backup operations. Campus IT was not in favor of the relationship; it took a great deal of effort for our LITS team to get their approval. There was equal work with Innovative Interfaces to resolve everything needed to put a secured ENCORE server on our network without jeopardizing any SU assets.

While this took much time and effort from the LITS team, they did a great job of getting everything together and up, running, integrated and automated. Backups run automatically at 2:30am each morning.

**Lessons Learned:** If the system or tool coming in has technological consequences or possible implications beyond the library (including backups and network connections), be sure that Campus IT is informed. It is very important for the vendor of the incoming technology and Campus IT to talk early in the process to ensure mutual understanding and a complete disclosure to the vendor for all the Campus IT requirements.

**LDAP (Lightweight Directory Access Protocol)**

One of the important considerations for this system and all systems that provide public access to library resources is a single point of access so that users/patrons do not have to sign on to various discovery tools multiple times during a single session. The ultimate goal is a single sign-on that would allow transparent movement among the various search/discovery tools within the same account. We thought this was indeed the definition of LDAP. We fought to have LDAP implemented. This was a big fight as we knew that the Voyager team in LITS would have to update Voyager to work with LDAP as well. We were committed to getting LDAP up and running for our patrons.

First, we had to prove to Innovative Interfaces that in the sell cycle we had been told that LDAP was embedded into the ENCORE System and not a separate package we would need to purchase. As a result, they agreed to absorb the additional $5000 they had intended to charge us for the product. Unfortunately, when we were several weeks into implementation for ENCORE LDAP, we discovered this did not work the way we had envisioned. Using ENCORE implementation to further the crusade for single sign-on did not work.

**Lesson Learned:** Again, it is important to delve deeply into the specific technical details and make sure we have a thorough understanding of the product and how it will interface with other products.
Explore
Explore was a feature that would take the patron from the ENCORE search results to other resources outside the catalog and the ENCORE harvested information. We thought this was a great advantage for the ENCORE product and patrons would find this very beneficial. However, the way Innovative Interfaces implemented this feature, it was unacceptable. We asked for several changes to improve the situation. Eventually we decided it was not worth the time and effort going back-and-forth with Innovative Interfaces on this issue. Since we could not afford the time to work through the implementation problems, we requested that Explore be deleted from our installation. Innovative Interfaces was happy to delete this feature for us, but we felt we were missing a major selling factor of the system and this continued to haunt us.

During Neil Block’s visit, we learned that we had not implemented the Explore button through the SFX conduit properly. This was partially our fault in that we did not understand our own SFX product well enough; Innovative Interfaces was partially at fault because they did not deliver what the sales force promised.

The next step is to create a sub team in the library to re-visit implementing the Explore button with the right features for the benefit of the users. This has not occurred to date and will be picked up by the sub task force in the future.

**Lessons Learned:** Persistence wins and keeping the vendor to the contract is an important concept.

Disability Accessibility
Throughout the implementation of ENCORE, we were implementing the Disability Accessibility product as well. Innovative Interfaces recognized that compliance with the Americans with Disabilities Act (ADA) was important for the continued success of their product. We were the first client to make this a mandatory requirement. They agreed to develop this enhancement for us. As we were testing the ENCORE general product, we were also testing the Disability product as well. The Disability product is similar to but not an exact match for the ENCORE product. We did have decisions to make and we had to ensure that it worked with the JAWS software.

**Lessons Learned:** If the vendor is developing a feature or function especially for you, make sure that someone on the team is an expert in that area to ensure thorough and valid testing. You need to be able to truly work with the vendor as a development partner or the work will not result in a useable enhancement.

Additionally you need to be able and willing to put in the extra time to be a partner with the vendor; this is an extra commitment, over and above the usual implementation
process. The enhancement will not meet your long term requirements if you cannot put in the time or do not have the in-house expertise.

**Show Availability**
After many different versions of Show Availability we went back to linking directly to the Classic Catalog (SUMMIT), the Voyager OPAC. This is not acceptable to Innovative Interfaces or to us.

**Beta 3.3**
We came up in the test environment with ENCORE 3.0 and were running our test data in this system. Then, minutes before the kickoff meeting, Innovative Interfaces switched from ENCORE 3.0 software to ENCORE 3.3 software. There were many new features in 3.3 such as the Classification (call number) facet, the Online Available facet, Language facet and the Places facet.

This caused problems for us; we were not aware of the impending change until after it was made. The subject specialists were understandably upset because they had to re-do instruction materials at the last minute before the semester started. Additionally the changes that we had made in 3.0 were not carried over to the 3.3 version. We had to go through everything again, retest everything again, and communicate to Innovative all the changes that needed to be added to the 3.3 version. In the meantime, the system was out of date (data loads were delayed) and not working as well as the previous 3.0 version; and we were very close to going live with the system.

**Lessons Learned**: Set ground rules with the vendor up front: they MUST let SU know before they make any changes to the system, no matter how small. Make sure all changes are seen within a test environment and that SU is allowed to review and test changes before going live with these.

**Bound Withs**
Separately published titles that are locally bound together in one physical piece are problematic for the users, the catalogers, and the discovery tools. Instead of each title having its own distinct bar code, they all carry the same bar code and are linked to the same item record. Known as “Bound Withs”, the differing catalog practices among the three libraries created even more problems in this situation.

**How did we get around this?????? What was the real implication???
Oversize and other notes
Oversize items are located on special shelves and not stored within the general call number sequence. To find oversize titles, patrons need to know the call number and the designation of oversize. This designation is stored in a note within the MARC holdings record and it is vital that ENCORE display this note field. If this does not display, the title cannot be found. Working through this issue was difficult as the request was new for Innovative.

Reserve and Reference Locations
Reserve and Reference are locations with special conditions attached; that is the loan period is restricted and often there is no loan period at all. For this reason, it is important for a patron to know a title is in Reserve or Reference, before going to the library or to the stacks to avoid possible disappointment if they were not allowed to borrow the title. As a result, it was very important that Reserve and Reference location information be included in a facet definition as well as in the primary location information in the browse portion and detail portion of the display screen.

Authority Records
While Authority Records provide valuable information to patrons, we were not ready to make these records available as yet. After some additional work, in the near future, we will begin the process of sending authority records to Innovative Interfaces. ENCORE can accept authority records so that they can be used within the ENCORE system. (Is this true or is this in 4.0???)

Covers
Our initial discussions with Innovative Interfaces included conversations on their relationship with Syndetics. Syndetic Solutions is a vendor for OPAC enrichment options such as cover images and table of contents data. Innovative stated they had integrated the cover images from the Syndetics product with their ENCORE product. We were happy to hear that as we had planned on subscribing to Syndetics for cover images and table of contents data. In bringing the deal with Syndetics to closure, we found their price unreasonable. As a result, the plan to use Syndetics cover images was abandoned with the unsigned contract.

After explaining this to Innovative Interfaces, Tim Healy came up with a solution he had used for other customers; he helped us link into Amazon and pick up the cover art, book jackets, from their site when applicable.
Finding Aids
Changes to the System

Suppress Google Images
Using the search term entered by the patron, ENCORE automatically searches and displays images from Google Images. Unfortunately, there is no filtering and as a result, some images displayed from this automatic search were inappropriate. We decided that we would suppress the images that the ENCORE System automatically displays.

Suppress Rating Stars
Rating stars were also suppressed. Syracuse University Libraries were concerned that showing ratings that were created by patrons might be interpreted as ratings by the University. This, some Syracuse University Librarians felt might be seen as endorsements or negative publicity for a specific title; it is a professional obligation for librarians to stay neutral.

Suppress Notes
There were certain internal procedural notes that are not meant for the public. All MARC field 852 and 866 with subfield X notes were displaying in the detail screen to the public. We requested that these notes be suppressed and Innovative Interfaces complied.

Suppress 692 and 694 from Tag Cloud
The MARC fields 692 and 694 must be suppressed from the tag cloud. These were key words that should not be added to the tag clouds. Innovative Interfaces complied.

Items without Item Records
Some items did not and will not have Item Records. These are items like SCRC, Belfer Cylinders, Internet items and Microfiche.

Language
Language can come from two different fields. Our catalog department used the Language field in the bibliographic record. The SCRC department used MARC field 041 in the bibliographic record. SCRC also had several codes that were not standard and caused strange results in this facet. This data had to be cleaned up rather rapidly so that the patrons would not see these strange results and then lose confidence in this facet altogether.
Classification facet
This was Innovative Interfaces’ solution to the Call Number facet request. We had requested the call number as a facet with the expectation that this would display the first two characters of the LC call number. If the user clicked on those first two characters of the call number class, the system would respond with a shelf order call number range and users could see the titles within that range. Instead, Innovative Interfaces decided to change the call number classifications into explanatory text titles that were too long and rather meaningless. After long talks, they changed it to shorter, more meaningful titles. But, we realized our request was not for a facet to refine an existing search. We wanted a call number index that would be searchable. In spite of everyone’s best efforts, the communication on this issue between Innovative and SU was flawed and we did not understand each other fully.

Searchable Notes
There were certain notes that we wanted the patron to be able to see. These notes resided in the MARC field 590 (local notes field) and also in the MARC field 690 field. This change was made especially for Syracuse University.

Proxy
EZProxy was an internal problem that we struggled with. The way we had initially set it up slowed down the system. Additionally, we had problems with the e-book package “Books 24x7”, which had a character within the URL that was not recognized by the ENCORE system. After weeks of false starts and receiving many reports of access problems (slow response, facets not loading, unable to authenticate at all) from patrons using the ENCORE System remotely, we had a major meeting with LITS, the Project Management Team and the ENCORE Technical Team. After much discussion, we came up with a list of things to address. Innovative Interfaces addressed issues from their side and Merritt implemented his idea to solve this problem along with other problems.

Books 24x7
After several false starts, the problems associated with Books 24x7 have been resolved. Merritt has determined that he can change the header on it so that it goes through the ezproxy system and authenticates the user up front.

RefWorks
RefWorks and e-mailing lists of books to oneself were critical requirements. After Innovative had proven that the RefWorks Beta version was working well, they updated our installation to include RefWorks. This upgrade instituted no new problems and we were very happy with the results.
**Show Availability**
The Show Availability link is crucial for our patrons to see what is Available (on the shelf) or Checked Out (in use by someone else). This link did show that for the monographs but for the serials it was less impressive. With serials, we saw a lot of entries that looked alike. We could not distinguish among these different volumes because the distinctive Enumeration or Chronology information associated with each volume of the serial did not display. We requested that these vital pieces of information be added to the display. Innovative Interfaces said they could and would add anything that was included in the Z39.50.

The Project Management Team continued for weeks trying to decipher what data is in the Z39.50 transaction. We talked with many people at Exlibris and, surprisingly, we had a very difficult time finding someone who actually knew what was within the Z39.50 transaction. Eventually Luis Cosmes from Innovative Interfaces told us that they had deciphered the transaction and the information we wanted was not available.

Innovative Interfaces did change the logic and initially we felt that would solve the largest problem but it was not enough to make the needed difference. We went back to linking Show Availability back to the SUMMIT display.

Unfortunately, though Innovative Interfaces did link back Show Availability back to SUMMIT display, it took two clicks to get to the users there. We wanted to do this with a single click. It took a few more weeks before Innovative Interfaces was able to implement this change but they did accomplish it.

**Changing Labels**
We requested a change to the labeling (font size, upper/lower case, etc) within the ENCORE display so that it would be consistent. There were many labels affected by this. Innovative Interfaces did make these changes as requested.
Usability and Surveys

Nancy Turner was on the Website Team and the ENCORE Team. She was charged with carrying information between the two teams. As such she also conducted a Usability Study that gathered information that really evaluated a combination of issues around both the website and the ENCORE system. She took on the task of speaking with patrons and determining how well the ENCORE System was meeting or not meeting the core requirements.

Nancy used the Morae software tool to collect the data and assist her in presenting the results.

The Participants

Each study takes about an hour to execute. It was difficult to find people willing to give the time to do this study but Nancy was able to recruit 15 people that did the study.

<table>
<thead>
<tr>
<th>Undergraduate Student</th>
<th>Graduate Student</th>
<th>Area of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>Political Science</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>Finance</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>Bioengineering</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>VPA: Industrial Design</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>Political science</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>Undecided</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>Public Relations</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>Art history</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>Anthropology</td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>Philosophy and Religion</td>
</tr>
</tbody>
</table>

The Tasks

There were four tasks that the patrons were asked to perform. Briefly the tasks were to:

- Find a book
- Locate an E-Journal
- Locate a Video
- Find Full Text Journal Article
The Results
A small team consisting of Lesley Pease, Pam Thomas and Linda Galloway came together to review the results from the Usability Studies. This is where they found we could improve and meet more of the requirements put forth from the Patrons.

<table>
<thead>
<tr>
<th>Problematic Area</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing Call Number Information in the center browse area</td>
<td>Add Call Number to the Detail Center Screen</td>
</tr>
<tr>
<td>Missing Call Number Information to the email lists</td>
<td>Add Call Number to the Brief and Detail Lists that are emailed</td>
</tr>
<tr>
<td>Confusion as to what is in the Show Location, Call Number and Availability option as compared to the Our Library Has</td>
<td>Delete Our Library Has</td>
</tr>
<tr>
<td>User not familiar with Journals Online and did not see category upfront</td>
<td>Make the ‘More’ option something more descriptive and maybe sort facets in alphabetical order</td>
</tr>
<tr>
<td>Confusion as to which tool to use when</td>
<td>Create a sub task force that will identify and detail each tool so that we can better instruct our users and librarians and make it a clear and easy decision</td>
</tr>
<tr>
<td>Moving from one system to another cost time and confusion</td>
<td>Make interoperability easier and more defined</td>
</tr>
</tbody>
</table>

Next Steps
The sub Task Force set up to evaluate the initial results will continue to work on this team. There will be another set of evaluations with more tests in the early spring semester as users become more familiar with the tool and as the vendor addresses the issues that have been brought up with these initial sessions and surveys. We hope that most of the serious problems uncovered will be resolved and the software will be updated but that remains to be seen and we will continue to track that diligently.
Outstanding Issues

Same Title at All Three Libraries
When all three libraries own the same title, the display order was confusing to patrons. Due to the way the database was loaded on the ENCORE server: ESF is first, then Law and lastly SU. Therefore the largest body of patrons (SU) found their record last in the list. However it is not readily visible on the results screen that the three records presented are from three different libraries.

We have requested a review of this. Initially we had hoped that they would sequence the records based on the TCP/IP address requesting the search so that if the request was coming from the SU library or main campus, that the BIRD Library record would show or if the ESF TCP/IP address was requesting the search then the ESF library record would show first, etc. Innovative Interfaces initially thought this would be an easy solution but then they were never able to implement it.

Our second idea was to add the owning Library information to the center of the screen. This is something that Innovative Interfaces is still considering and will probably implement within ENCORE 4.0.

Floating Journals and E-Resources
Journals (serials and periodicals) and e-resources are supposed to float to the top of the search result set as part of the Innovative Interfaces proprietary relevancy ranking algorithm. This is highly desirable from the patrons’ point of view, but unfortunately the results are extremely inconsistent. This has been reported with examples, to Innovative.

Minor Misspellings
When we searched for a new discovery system, we wanted the system to forgive users’ misspellings and to respond with a recommendation on other ways to spell the terms entered in the search query. With ENCORE we have found that this is also inconsistent. It does work, but not always. For example, when you drop the ending ‘e’ from a common word, there are times when it would not find a title even when the all the rest of the title was accurately spelled. We felt this was unacceptable. Innovative Interfaces was astonished to see these examples and are currently looking into this as well. The following were our examples:
• Minor misspelling in known item search (using complete title) – results not as expected. Examples are: Dictionary of mythology, folklore and symbols. Leave off final “e” of folklore and this title will not be returned in the search.
• Search entered = pontificale romanum clem. System response = Did you mean: le pontifical romain au moyen age. Correct title was = Pontificale romanum clementis ; when clementis was spelled out, system retrieved correct title.

There are very few truly outstanding issues and all of these are items that Innovative Interfaces is aware of and actively working on. As a result there is little for the whole team to continue to do.

Comparison of ENCORE System to Summit
There was much discussion and confusion about where one tool, SUMMIT, excels and where another tool, ENCORE, performs better. Or if one totally replaced the other. The confusion led to the Subject Specialists and even many of the Reference Librarians going back to what they understood and knew, SUMMIT. However there is actually a place for both of them. Here is a quick synopsis of what the Library Staff needs to understand about the ENCORE System and SUMMIT so they can steer the patrons to the best tool for their specific situation. Sometimes one tool will fill the need more completely than another tool. Here is the comparison:

<table>
<thead>
<tr>
<th>ATTRIBUTE</th>
<th>ENCORE SYSTEM</th>
<th>SUMMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>Not the best</td>
<td>Currently has most complete info</td>
</tr>
<tr>
<td>Links to other tools for additional services</td>
<td>Only links to RefWorks, has patron account with email capabilities and saving lists.</td>
<td>Links to Iliiad, Recall, Campus delivery, Patron circulation Account</td>
</tr>
<tr>
<td>RefWorks</td>
<td>Exports to RefWorks</td>
<td>No linkage</td>
</tr>
<tr>
<td>ContentDM</td>
<td>Passes Search query and finds items in ContentDM</td>
<td>No linkage</td>
</tr>
<tr>
<td>Call Number Search</td>
<td>Does not do a call number search</td>
<td>Does do a call number search</td>
</tr>
<tr>
<td>Search Capabilities</td>
<td>Search by keyword only</td>
<td>Search by keyword &amp; structured searches</td>
</tr>
<tr>
<td>Facets</td>
<td>Facets provide ability to refine existing search to find materials by a number of different attributes such as location, format, collection, date, classification, language, etc.</td>
<td>There are no facets in SUMMIT Refining and organizing search results is very difficult.</td>
</tr>
<tr>
<td>Metalib</td>
<td>Passes the search query through to Metalib</td>
<td>Does not link to Metalib</td>
</tr>
</tbody>
</table>
Summary of Lessons Learned

- Investigation
  - Ask Questions! Can’t ask enough questions
  - Initial difficulties with Metalib due to hosting externally. Innovative Interfaces assumed we hosted Metalib in-house. This caused a great deal of difficulty and prevented implementation of the product as described in the sell cycle.

- Resource allocation
  - Articulate the priority of the project for the entire Library
  - Review team members’ current assignments with dept head and others, as appropriate
  - Delegate, reduce or eliminate as many competing assignments as possible for team members
  - Ideal: devote the appropriate LITS staff member exclusively, 100%, to the project

- Listening
  - Allocate a substantial amount of time to listening to others

- Communication
  - More communication to library staff, University community
    - Example: what is ENCORE? Many thought it was a replacement catalog
  - Communicate idea that “many tools are needed”
  - Communicate idea that there is “no magic answer”
  - Communicate idea that goals include taking a risk, rising to a challenge, working through a learning opportunity
  - Communicate this broader message: there is a need to continually learn new tools, new technology solutions, a constant learning curve for something… .
    - ENCORE is one example of this broader message

- Cooperation:
  - Asking competing vendors to work together for your benefit is very difficult, if not impossible, to do
Identify in house experts for the existing tools; this is crucial to achieve interoperability among numerous discovery/delivery tools:

- The SFX expert
- The Metalib expert
- The Voyager ILS experts for various modules (cataloging, circulation, etc)
- The EZProxy expert
- The cataloging data and past practices expert

Recognize that presenting the bibliographic data in new ways, creates new problems, reprises old problems

- Ex.: Records that contain obsolete MARC coding
- Ex.: Differing cataloging practices among SU, LAW, ESF
Next Steps
While the team is winding down, there will be little to do and will no longer meet regularly. The team has served its purpose to implement the ENCORE System. We might be asked to come back together in the future to evaluate the effectiveness of the ENCORE System after a couple of semesters in the working environment. However at this point in time there is no on-going need to meet weekly.

There is a need for a variety of smaller sub teams. These teams will carry forward solving a number of issues that have been identified by the team. The teams identified and a quick description of their mission is as follows:

Maintenance and Ongoing Development
The main purpose of this sub taskforce is to determine who is responsible for ensuring that as we continue to work with Innovative Interfaces and as our cataloging department continues to evolve, we stay in communications and ensure any upgrades will only positively affect our patrons and any changes to our catalog will be correctly passed through the Discover Tool.

Tasks and Responsibilities
- Provide Innovative Interfaces with single point of contact for ENCORE
- Continue give-take for remaining outstanding issues
- Develop help screens (additional members will be needed for this task)
- Receive information from the vendor regarding upgrades, enhancements
- Communicate both specifically and broadly to the SU Library, Law Library, ESF Moon Library regarding product upgrades, enhancements, new version, etc
- Report both specifically and broadly to the SU Library, Law Library, ESF Moon Library regarding product problems identified by the vendor or by the user community and follow-through to resolution
- Subscribe to and monitor appropriate vendor listserv for the product
- Notify the ENCORE implementation team of appropriate issues as needed
  - Example: working with Innovative Interfaces to develop browse/search by call number. This would require constituting a group including cataloging expertise and public services experience from all 3 libraries

Explore Feature
The main purpose of this taskforce is to determine if the Explore Button would give additional functionality that patrons would find beneficial to their Discover Experience.

Tasks and Responsibilities
- Gain solid understanding of this feature – how it works
- Review value added of this feature in context of all other discovery/delivery products
Usability
The main purpose of this sub taskforce is to identify where the Discover tool is and where is it not working as expected.

Tasks and Responsibilities
- Obtain input from patrons from various techniques
- Determine what can be solved by the current Systems and what cannot
- Determine if what cannot be solved is so important that we need to revisit the product or find a supplementary product.
- Outline possible remedies that can be used to solve patron’s usability problems.
- Work with Vendor or local LITS and cataloging department to enhance or fix system to work better for all patrons

Discovery / Deliver Product Suite Definition
The main purpose of this sub taskforce is to identify the various tools that Syracuse University Libraries have purchased for the patrons and evaluate their interoperability to each other as well as to remote locations.

Tasks and Responsibilities
- Illustrate by schematic (use graphic already drafted) products that we have
- Provide a narrative description of each – its purpose, list of features, functions, value added of each, what data is being searched by this tool, what data is not being searched by this tool; what data can be delivered by this tool, compare and contrast strengths and weaknesses
- Note various log-in or need to set up accounts for each
- Articulate interoperability --- products which easily pass user along as their search naturally progresses and products that don't pass user along
- Articulate interoperability --- products that easily pass data along to other tools or services (such as ILL request); when does this fail to happen
- Where are the major speed bumps or roadblocks for interoperability? What causes these roadblocks? For example, if a product is remotely hosted, would local hosting give us chance to eliminate roadblocks?
- Important to investigate all the above not only in terms of on campus, but the off campus, remote user experience must be considered fully as well
Appendix A – Location

- Architecture Reading Room
- Barclay Law Library
- Bird Library
- ESF Adirondack Ecological Center
- ESF – Ranger School
- ESF – Cranberry Lake
- ESF – Moon Library
- Geology Library
- Hawkins
- International – Beijing
- International – Florence
- International – Hong Kong
- International – London
- International - Madrid International Strasbourg
- International – Zimbabwe
- M.L. King Lib – Sims
- Mathematics Library
- Science and Technology Library
- Warehouse
Appendix B - Collections

- Atlases/Maps
- Belfer Audio Archive
- Government Information
- Images
- Internet
- Journals (Physical + Electronic)
- Reference
- Reserves
- Law - NY State Law Collection
- Law - Office of Career Service
- Law - Office of Clinical Pgms
- Law Reviews
- Special Collections
- Theses/Dissertations
- Video
Appendix C – Format

- Books
- Journals-Electronic
- Journals-Print
- Databases
- Videos
- Images
- 3-D Objects
- Kits/Mixed Media
- Atlases and Maps
- Scores
- Sound Recordings-spoken word
- Sound Recordings-musical
- Software
- Internet
- Microfilm/Microfiche
- Archives/Manuscripts
Appendix D  The Full Usability Report

ENCORE Report: Results of Feedback and Usability

Overview
This report summarizes feedback from the online survey in place since the launch of the web (July 28) and the usability testing conducted on the website’s search tools conducted in October of 2009.

Usability Testing

Goal of the Testing

Usability testing was conducted on the library’s suite of search tools available from the home page. Users were asked to conduct a series of five basic search tasks, basic tasks, from finding a known item and checking its availability to browsing for materials in a subject area. Pilot tests were conducted from September 14 through 18. These tests were conducted with five users to evaluate the questions and the use of the software for analysis and presentation of the test results. As a result of the pilot testing, one question was altered and one was added to the test.

The actual tests were conducted on October 6 and 7th in the Bird Library Learning Commons. Users were recruited through the offer of a flash drive, a popular incentive that attracted many students, both graduate and undergraduate. Users agreed to have their session recorded. Morae software was used for this function. The recordings were analyzed by task, difficulty and time on task, methods of analysis all supported by Morae. In addition, a short online survey was delivered via the software that was used to collect demographic data and ask one open-ended question of the user.

Task 1: Find a Book
Locate the book Beloved by Toni Morrison. Is this book available for you to check out of the Library?

Users had little trouble locating a record for this question. However, half did not recognize that the record they were looking at was something other than Toni Morrison’s Beloved. Further testing would be required to determine the reason for this. Are users in a hurry? Is the screen confusing? In one test the difference between Library Has and Library Availability was unclear.
In conducting this task, many users typed both the author’s name and the name of the book title. In the Discover system, this search worked more efficiently than typing the title.

**Problematic Areas:**
- Missing call number information
- Confusion over labels, Show Location, Call Number and Availability and Library Has. Users do not have sufficient information to know where to click.

**Recommendation:**
- Provide call number information on results screen.
- Consolidate data from Show Location, Call Number and Availability with Library Has or remove Library Has link.

**Task Two: Locate an E-Journal**
*Locate an electronic journal in the subject of psychology.*

The E-Journal search box is useful for patrons who know that their journal is online and know the title. Most users selected the E-Journal locator to carry out this task. There was one exception. This demonstrates that users are reading and using the tabs on the search box or may already be familiar with this tool and its use. One user commented that he wanted to search by subject, not title and was confused by the search explanation. In another instance, a user who did navigate to the Search by Category option with the Locator was confused as to where psychology would fall in the subject classification.

**Problematic Areas:**
- Users may not know if their journal is online.
- Within Discover, users are not using the facets to focus their results to Journals-Online.
- Subject categories as presented in the E-Journal Locator may not match users “mental model” of a subject classification.

**Recommendation:**
- Reconsider display of collections and formats. Users do not click on “more” when the pattern of the facets is not discernable. For Authors, Dates, it is clear what “more” clicking might yield, but for Collections it would not be clear.

**Task Three: Locate a Video**
*Find a multi-media item, like a video, for a class presentation you are doing on health and the college student.*
This task required the user to create a search that combined subject terms and limit to a specific format. We were interested also in whether they would notice the borrowing policy which restricts circulation to faculty only. No student noticed that videos are available for check out to faculty only. Many used the word “video” as a keyword in their searching.

**Problematic Areas:**
- Linking to the MediaNet utility means that users have 3 links to review in order to determine availability. Two of these links are emphasized with underlining.

**Recommendations:**
- Consolidate data from Show Location, Call Number and Availability with Library Has or remove Library Has link.

**Task Four: Find Full Text Journal Article**

*Find and access the full text of an article from the online journal Nature.*

This was a difficult task to complete for users who selected the Discover tool and the Articles tool. Successful searchers of full text in this task used the E-Journal locator to access the journal Nature by name. If they selected the first menu option, they were able to easily navigate to a full text article in that journal. Those who had difficulty:

- Used the Discover tool to locate the electronic journal. Not only does the journal not come up on the first results screen, it is not clear on the facets how to limit to online only.
- One user selected the Articles tab and searched for Nature there, actually conducting a federated search of many journals on the keyword Nature.
- Some users presented with the SU Links menu thought this access point requires a known citation to be useful.
- Others selected the second menu item, ProQuest, not reading the screen to see that no full recent full text is available.

**Problematic Areas:**
- Single word titles are difficult to locate using the Discover tool. Although this issue is being addressed by the vendor, problems remain.
- In this search, the appropriate facet for Online Journals does not display unless the user selects more.
Recommendations

- Reconsider the facets. Fewer categories or placement of options side by side (alphabetical ordering would place Journals Online and Journals Prnt next to each other.

- Continue work with vendor to improve relevancy ranking for single word titles (both journals and monographs)

- Evaluate display in OPAC of e-journals to insure that access to full text is clearly described.

Task Five: Locate Primary Resources

Show me how you might locate first-hand accounts or primary resources (diaries, newspaper articles) by people who worked on the Erie Canal (1840-1860).

This was the second task specifically designed to see how users take advantage of the facets within ENCORE. The question was written so that users would understand 1) what primary resource means and 2) they were searching for older materials. Those who relied on prior knowledge of what to expect in what format did best with this task. For instance, users who selected the facet microform, expecting that old newspapers would be available through this format, located an appropriate result quickly.

Like the video exercise, it was interesting to see that users put the entire search query, including dates, into the search query. Several searchers used the facets as well, selecting microfilm as a format as they assumed that older newspapers would be contained there. Special Collections, another facet leading to primary resources, does not display as a facet.

Users did not use the “more” for any facet – preventing them from seeing all their options.

Problematic Areas:

The “more” was not used within facets that require knowledge of the collections.

Recommendation:

- Reconsider display of collections and formats. Users do not click on “more” when the pattern of the facets is not discernable. For facets like Authors and Dates it is clear what “more” clicking might yield, but for Collections it would not be clear.
Survey Feedback

A feedback survey has been in place on the library’s web site since July 2009 and changes have been made as feedback is received. The survey was not intended as a tool for gathering feedback about just the ENCORE utility, rather, it asks about the users experience with the entire web site. Users were asked how their experience using the library’s web site could be improved. Out of 69 responses to this question, only 5 specifically addressed concerns with Discover. A user felt that the “Google like” search box was a dumbing down of the library search enterprise.

Several commented that they would like to see the call number on the same screen as the search result. “The new browser for the Summit catalog is likewise an obvious front-end. Many of the new features it offers are promising, but the fact that it cannot display the availability or even the call numbers of the items it lists make it useless as a search tool.” One patron is particularly blunt: “Get rid of the Discover tool and go back to the original web site design” One complains of the time to connect between SUMMIT and Discover for call number information. Appendix A includes all comments received related to Discover.

Recommendation:

- Continue to advocate with vendor for item-level Voyager extract allowing for call number display on Discover.

- Placing books in a cart and emailing those records to yourself results in a list with no call number. This has not been fixed. The resulting list provides a hyperlink to the original record not useful if the list is to be printed.

- Report list functionality issue to vendor. It has been replicated.

Recommendation:

- Report list functionality issue to vendor. It has been replicated.

General User Issues and Recommendations

- For many tasks, the SUMMIT library catalog remains the most efficient and effective search tool for library resources. Recommendation: SUMMIT should be placed next to the other search tools available to users.
• Users have trouble selecting a discovery tool based on the information provided to them. For instance, when searching for articles in an online journal, users are as likely to choose the Articles tab as the E-Journal or Databases Tab. 
Recommendation: Consider an intermediate page that organizes databases by subject. From there, users can search by title or browse by subject category.

• Locating resources currently requires moving from one system (Discover) to another (SUMMIT). 
Recommendation: Improve the interoperability between Discover and Voyager Call Number, Location and Availability information.

• The greatest challenge for users is not knowing what tool is best for what task. Our web site should be evaluated with that in mind. Users need information ahead of their search to determine suitability. Are these adequate? Recommendation: Conduct additional tool-specific usability testing on Discover, Metalib, SFX and upcoming SUMMIT catalog interface.

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Source Documentation

A. Comments
Comments related to Discover from the web site feedback form question, “How could your experience be improved?”

<table>
<thead>
<tr>
<th>Date</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/29/2009</td>
<td>thanks so much for finally changing from SUMMIT. that search engine was absolute rubbish. ENCORE is far superior and is used by so many other universities around the world. you have done a great service to this university. however, with e-journals you should directly link the resource to ezproxy instead of going through SULinks. it is alot quicker. there is no need to be re-directed to SULinks, or have another browser window opened. to see exactly what I am talking about visit library.uq.edu.au &gt; type in the name of an e-journal, e.g. &quot;Social Theory and Practice&quot; and see how they display the availability online with a direct link to the eletronic resource. this is how you should setup the elektronc resources on the SU library website. hope this helps.</td>
</tr>
<tr>
<td>08/11/2009</td>
<td>Eliminate the second click to view the Call Number. Also as I am working on Reserves, Encore does NOT list the item is on reserves. It does NOT even list the item is at SciTech Not at Bird on one Bird book that we've added to the SciTech Reserve Fall monographs. E-mails have been sent to various staff members.</td>
</tr>
<tr>
<td>08/11/2009</td>
<td>When you go to the record for a book, clicking on &quot;show availability&quot; does not work. It just says &quot;loading..&quot; and never loads. It does seem to work when you click on show availability from a list of search results.</td>
</tr>
<tr>
<td>08/13/2009</td>
<td>I randomly selected 7 journals that SciTech Library has in storage. Only ONE item record said it was in storage. One item was not found in Encore at all (it was in the Classic Catalog). Once while in Encore it flipped me to the Classic Catalog. Three issues with searching Encore that need addressing or improvement... 1. Storage Levels are not given in a record for 6 out of the 7 items I tried. It lists in one case over 30 line items (saying &quot;SciTech Library Storage Level 6 , call #, Available), NOT THE ISSUE IN STORAGE THAT IS AVAILABLE. (6 out of the 7 items did this, one record listed Moon items the same way.) 2. In 6 out of 7 records I would click Show Availability and it would say See Library Holdings. Why bother with show availability line, if it takes one more click to see the availability. 3.When I put in</td>
</tr>
</tbody>
</table>
the search box the name of the journal, it lists (like the Classic Catalog) two, three or more records. It is possible that to find what the library owns you will have to go through three records, including clicking twice from show availability to show holdings. Then you may get to the storage level record which will list only that we have an item 30 times without giving the volume number. The journals I searched, if you want to see what I saw, were 1. Analytical Biochemistry 2. Journal of Experimental Zoology 3. Chemistry and Physics of Lipids 4. Nuclear News 5. Polymer 6. Bulletin of Science, Technology and Society 7. Thin Solid Films

1. In both IE and Firefox 'Discover' pages are labeled as 'Encore' on the tab. 2. When Discover initially finds a list of possible hits, the location and call number of each would be helpful ON THAT PAGE. This is especially true for short lists, avoiding the trendy but pointless-with-small-lists cart, and immediately providing the patron with necessary information without further digging when only one item is found. The location would come in especially useful when multiple branches or ESF have the same title. I foresee patrons clicking on the first item they come to in a list, not noticing the same title down farther, and thinking they have to go to ESF or MLK for something that is in Bird or Sci Tech. (A couple of searches I’ve done have put the ESF owned title above the Sci Tech title.) 3. You may hear this from multiple sources: When searching for journals, Discover's listing of availability is sparse. For instance, for Analytical Biochemistry, Sci/Tech Lib-Storage, Level 6 QP501 .A64 AVAILABLE Sci/Tech Lib-Storage, Level 6 QP501 .A64 AVAILABLE Sci/Tech Lib-Storage, Level 6 QP501 .A64 AVAILABLE Sci/Tech Lib-Storage, Level 6 QP501 .A64 AVAILABLE Sci/Tech Lib-Storage, Level 6 QP501 .A64 AVAILABLE Sci/Tech Lib-Storage, Level 6 QP501 .A64 AVAILABLE Sci/Tech Lib-Storage, Level 6 QP501 .A64 AVAILABLE is a part of the list that shows up, apparently one line for each volume, but without the volume number rather hard to interpret. 4. The problem in number 3. could probably be overlooked if clicking on the 'Classic Catalog' took us into the Summit view of the search originally done in Discover/Encore.

A couple of days ago, I searched for a recently published book titled "Reopening the Frontier" using the Discover search box. It generated no results. I assumed the library didn't have the book, so I placed a request with a subject librarian to purchase the volume. However, she did find it in the database by using the 'classic' SU Library interface. This morning, I entered the book title again on Discover and had the same result (i.e., nothing). This leads me to question the effectiveness of the new library web site. At a minimum, a library catalog must be able to locate resources when the exact name of the item is entered. Bob Wilson rmwilson@maxwell.syr.edu Assistant Professor Department of Geography
<table>
<thead>
<tr>
<th>Date</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/21/2009</td>
<td>I have not succeeded in finding the call mark for the book I was looking for, although I could find the book in the Discover engine. Call marks should appear together with the book... we do not want to click many more times....They are an essential info for us...</td>
</tr>
<tr>
<td>09/07/2009</td>
<td>go back to the classic catalog</td>
</tr>
<tr>
<td>09/24/2009</td>
<td>Locating a book stupid. If I ask for a TITLE, I don't expect to be told the system can't interpret my request!</td>
</tr>
<tr>
<td>09/29/2009</td>
<td>This is the most counter intuitive. I have lost again and again my searches and &quot;lists&quot; that I created. It keeps crashing. Where do I renew my books.</td>
</tr>
<tr>
<td>10/03/2009</td>
<td>Book availability information often just displays as &quot;loading&quot;, and never gets beyond that point. This is true both in Firefox 3 and IE 8. Availability info, using the old website, comes up fine.</td>
</tr>
<tr>
<td>11/04/2009</td>
<td>I hate that &quot;Search&quot;, &quot;Discover&quot; one dumb google box search. It takes me too many clicks to find the databases I'm looking for. I also do not appreciate the meta search. It's very frustrating.</td>
</tr>
<tr>
<td>11/16/2009</td>
<td>Get rid of the Discover tool and go back to the original web site design</td>
</tr>
<tr>
<td>11/19/2009</td>
<td>I really liked the old library system better for searching for journal articles and books. I can't seem to find anything using discover.</td>
</tr>
</tbody>
</table>

**B. Comments from Usability Testing**

- At the end of the usability test (conducted October 6-7, 2009), each user completed a brief survey. In response to the question, “Are there ways we could improve your experience using this web site for locating library resources?” several are relevant to the Discover tool.

- Search engine needs to be improved to match the query to the results: when I search for the nature magazine, the top hits are other titles that include the word 'nature', but not the magazine whose name happens to be the word that I typed into the search bar! I shouldn't scroll down to find it... E-Journal inquiries should be integrated to the main search engine: I shouldn't jump to the E-Journals tab to search for an electronic journal.

- When logging in on discover, site keeps crashing
• when you perform a search using discover, you get the option of adding to your lists (which is great) but the two problems. First, site keeps crashing and second if you are able to log in and export your lists, the lists don’t contain the call number, therefore making all the hours you spend making these list, waisted

• narrowing down by categories is not obvious

• finding your account not using the old library website is hard

• Over all the system is very good. It would be nice if there was a primary source catalog or if there is one highlight it or make it more readily available. otherwise all the other features seem to work well.

C. Demographics for Usability Testing

<table>
<thead>
<tr>
<th>Undergraduate Student</th>
<th>Graduate Student</th>
<th>Area of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
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<td>Political Science</td>
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<td>X</td>
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<td>Finance</td>
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<td>Bioengineering</td>
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<td>VPA: Industrial Design</td>
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<td>Art history</td>
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<td>X</td>
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<td>Anthropology</td>
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<tr>
<td>X</td>
<td></td>
<td>Philosophy and Religion</td>
</tr>
</tbody>
</table>
D. Time on Task

![Time on Task Graph](image)

E. Difficulty of Tasks for Users
(0= Completed with ease; 3=most difficult )

![Difficulty Graph](image)