Discovery Comparison

Review Date: Spring 2016

In Spring 2016, selected members of the Council of Chief Librarians, Electronic Access and Resources Committee (CCL-EAR) undertook a comparative study of five discovery tools:

- Ebsco Discovery Service (EDS)
- Encore Synergy
- Primo
- Summon
- Worldcat Local and Discovery

The review focused on the coverage, search interface, cost, availability/accessibility of service, and customer service as well as customization, and mobile options for each product.

Method

During Fall 2015 and Spring 2016 CCL-EAR conducted a comparison review of Discovery Services for the California Community Colleges. To inform the comparison a survey was sent to the 113 colleges to learn if institutions were using Discovery Services, if so, what they were and what were their experiences with different aspects of the Discovery Services. If institutions did not have a Discovery Service they were asked why and if they were interested in having one. In February 2016 CCL-EAR hosted a Discovery Services meeting and panel where all 113 colleges were invited. The survey results were reported and a panel discussion followed. Open discussion after the panel revealed a number of concerns (See Summary of Shared Concerns at the end of this review) and CCL-EAR realized a comparison review would be challenging. Each interface was highly customizable. Content was based on the subscription databases the college had and the visibility and results ranking was based on the Discovery Service. Some products were integrated with Integrated Library Systems (ILS) and other were stand alone products. Reviewers were granted guest access to products across the state, CCL-EAR conducted this comparison review.
GLOSSARY

Application Programming Interface (API) — A method for programs to communicate with each other.

Discovery solutions — A search tool that relies on a unified index to search multiple resources.

Federated search — the process of searching multiple resources simultaneously and aggregating results. Process relies on live, real-time queries sent to multiple targets.


Integrated library system (ILS) — A tool used by libraries to run core services. Contains a backend used by staff for functions such as cataloging, maintaining course reserves, managing user accounts, etc. and a front end, called an OPAC, used by patrons.

Knowledgebase — A centralized collection of information. In a library context knowledgebases are collections of resources used to populate search tools such as discovery solutions.

Link resolver — A tool for connecting sources, such as bibliographic records in a database, with targets, or the full-text of the item itself.

Metadata — Data that describes other data. In a library context, metadata often refers to the information contained in a bibliographic or MARC record.

OPAC — Online Public Access Catalog, typically the front-end search interface that patrons see and use. OPACs are a feature of an ILS.

Proxy server — A tool used to authenticate patron identity by passing information to outside resources.

CRITERIA

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Ebsco Discovery Service (EDS)</th>
<th>Encore Synergy</th>
<th>Primo</th>
<th>Summon</th>
<th>Worldcat Local and Discovery</th>
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<tbody>
<tr>
<td>Content/Search Interface</td>
<td>GVRL, EBSCOhost databases, PLoS, Sage</td>
<td>Ebooks from GVRL, ebook Collection (EBSCOhost), Relevancy Ranking: Encore uses RightResult™ relevance ranking technology</td>
<td>EBSCOhost databases, Films on Demand, Ebrary Academic Complete; ABI-Inform (Proquest), Ebrary College Complete, Lexis-Nexis Academic, JSTOR, ProQuest Newsstand and international</td>
<td>ProQuest Educational Journals, ProQuest Newstand, Gale’s Academic OneFile, Gale’s Science in Context, JSTOR, Lexis-Nexis</td>
<td>Ebooks from GVRL, Infobase, and EbscoHost. Articles from EBSCOhost, Gale databases</td>
</tr>
<tr>
<td>Quality of metadata</td>
<td>Relevancy Ranking:</td>
<td>Relevancy Ranking:</td>
<td>Relevancy Ranking:</td>
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<td>Varies. Metadata of local catalog is adapted from library's own MARC records, with added features e.g. &quot;Books by same author&quot; and &quot;Reviews&quot;; many EBSCOhost records include abstracts and subject headings; records from other vendors may include rich metadata or in some cases a total absence of abstract and subject headings. Some content from outside vendors can be searched full-text.</td>
<td>Primo uses ScholarRank™ technology which ranks query according to following methods: 1. Query-item match 2. Item’s value score 3. User’s characteristics 4. User’s info. needs</td>
<td>Summon uses Dynamic rank and Static rank to the ranking of the record in the results. Dynamic rank focuses on matching up a user’s exact query with all of the metadata and full text in the Summon index while Static rank helps boost relevance based on attributes of an item, such as content type, scholarly, publication date, citation counts. In addition, there is “Recommendations” which offers guidance to users at the point of need such as Best bets, Database recommender and related search suggestions</td>
<td>Here are several components to the WorldCat Local relevance algorithm: 1. The search terms in the author then title fields are weighted first, then the rest of the fields of the record 2. Term frequency 3. Proximity of the terms to one another 4. Recency (more recent items are weighted more heavily) 5. How widely held 6. Locally held items are surfaced to the top of the results if the library chooses this as the default sort</td>
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</table>

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<tr>
<th>Context, ScienceDirect, Lexis-Nexis, JSTOR</th>
<th>newspapers</th>
<th>up in the first three screens of results)::: Westlaw, GVRL, most EBSCOhost databases, Ebrary catalog (books)</th>
<th>screens of results)::: ProQuest databases (Alt-PressWatch, Ethnic NewsWatch, GenderWatch), LexisNexis, JSTOR</th>
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</thead>
<tbody>
<tr>
<td>which weights materials based on where the search term appears in the record data and assesses other factors such as the type of material and adjacency of terms.</td>
<td>Databases buried: JSTOR, ScienceDirect, Sage, Emerald</td>
<td></td>
<td></td>
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<tr>
<td>Relevancy Ranking: Results are weighted to preference local holdings by default, but it can be changed if desired. The major contributing factor in relevance scoring is the frequency of the user's search terms in matching EDS metadata and full-text records. The most influential fields in EDS are: 1. Matches on subject headings 2. Term appearance in the title 3. Author-supplied keywords</td>
<td>Summon focuses on matching up a user’s exact query with all of the metadata and full text in the Summon index while Static rank helps boost relevance based on attributes of an item, such as content type, scholarly, publication date, citation counts. In addition, there is “Recommendations” which offers guidance to users at the point of need such as Best bets, Database recommender and related search suggestions</td>
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<tr>
<td>Discovery Comparison (Spring 2016)</td>
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<tr>
<td>CRITERIA</td>
<td>Ebsco Discovery Service (EDS)</td>
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<td>Customization</td>
<td>EDS offers interface customization via the administration site that includes: Logos, Background Colors, Text/Link Colors, &amp; Toolbars. Extensive further customization of the interface can be accomplished by means of embedded javascript; EBSCO hosts code samples in its wiki and for a fee will manage and host such &quot;apps&quot;. The EDS API allows even more extensive interface customization, and can be used to host EDS content on a platform other than EBSCOhost. There are not many options for customizing results. Options include enabling the records your library subscribes to as a limiter, deciding which databases should be included in your listings, and setting the order for what</td>
<td>Encore Synergy advertises &quot;extensive customization&quot;, but little information is available on those options other than what is available via integration with EBSCO’s EDS (with the EDS being the back end and Encore being used as the user interface). Administrators can set the order of full text links that appear under a result for specific item. For more information, see EDS. In Encore it is possible to separate the results of a catalog search and articles or include them both in an integrated list. Logo can be customized.</td>
<td>Primo advertises that the user interface (both how users search and how results are displayed) can be customized. Logo &amp; the banner area customizable. Primo advertisements indicate that &quot;ranking algorithm, metadata, and UI can be customized&quot;. Libraries can indicate if they want Primo to search physical, online, or both types of resources. Primo offers an additional way to affect search results through personalization. Personalization allows users to change relevancy by discipline, publication date, or type of materials needed (article, book, etc.). Also allows LibGuides to be placed top in results.</td>
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<td><strong>Citation Options</strong></td>
<td>5 citation formats for books and 8 citation formats for articles are available to view/copy/paste with options for exporting citations which includes 8 direct export options and 4 options for other bibliographic managers.</td>
<td>Citations available to export to 3 bibliographic managers and to view/copy/paste from native UIs (if available) &amp; not within the discovery layer.</td>
<td>3 citation formats are available to view/copy/paste and export to 2 bibliographic managers for both books and articles.</td>
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</table>
### Initialization and Administration

<table>
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<tr>
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| Initialization needs at minimum databases selected and base links up. More time is involved if you want the Catalog implemented of which EBSCO will provide assistance for setup. The administrative interface is almost identical to the general EBSCOhost admin interface for all of the databases. One can preview changes by creating a secondary profile. Updates may happen quickly or up to 20 minutes after they are saved. Statistics are available in many varieties, including COUNTER and SUSHI compliant ones. One challenge working with the interface is some changes may seem "buried" in a 2nd or 3rd level layer, so if you are not seeing the desired changes you want, you need to double check at which layer (example: basic search vs. advanced search). Branding page makes it relatively easy to sure up the look you want. | Three phases to product implementation: Preparation, Software Installation, and Training & Evaluation. Set-up and implementation requires the installation of an active SSL. Libraries must submit network information for server type(s); configure the firewall for Encore; Register the Encore domain to the IP address of the Encore server. During the software installation period, the vendor installs the Encore and/or Synergy articles software and configures the system for training and evaluation. Before the scheduled date of installation, librarians must select up to 5 databases (or database "portfolios") to be added. (Libraries have the option to include more than 5 databases for a charge). Innovative’s | The review team never had an opportunity to see a Library’s admin, nor was a Librarian that has Primo able to put in time for this portion of our review. CCL-EAR hopes to revisit this gap regarding Primo at a future date. Given that, at the forum, the two librarians from CSU Sacramento warned that maintenance of the admin interface regarded constant attention and needed significant staff time. | Initialization requires time to map the catalog. Serials Solutions admin interface includes a Summon section of which the librarian first needs to put in the databases’ at its institution in 360 Core and make sure linking capabilities are up with the 360 Link portions. One main challenge with the administrative setting is that it is slow, with long screens to scroll, and there is no way to preview changes that will not happen until one or two days later. Statistics are Counter and SUSHI compliant and there is a clear option to include Google Analytics for the Discovery site if one wishes for further statistics. There’s an option by vendor how you want your results prioritized, but EBSCOhost is not included. Good branding sections to sure up the look you want for the page. | Initialization will take months if you are starting with the entire WMS catalog, but briefer if you already have Worldcat Local and want to simply move to the Worldcat Discovery interface. The administrative interface is three different places: The regular one which has the Collection Manager (linking to articles and databases content to be retrieved), the Config file (which has the Metasearch and search interface features) and the Firstsearch Statistics admin. Collection Manager is where either OCLC gets automatically from vendors or you through a vendor or on your own input your Knowledgebase database files (KBART files). And the separate Metasearch option in Config is where you can select the databases-- some of which require
<p>| Availability/Accessibility of Service | After installation, Innovative’s SourceManager Tool allows libraries to manage the sources included in Synergy -- request cosmetic display changes and manage addition or removal of resources. Configuration options for Encore/Synergy include ability to choose between 2 “skins” (color schemes) add a footer with branding, search by call number and other standard number, Worldcat Integration, and Google Books preview. | Product is able to be configured to pass web accessibility tests. | Product seems to be able to be configured to pass web accessibility tests. | Product is able to be configured to pass web accessibility tests. | Authentication in order for them to be searched within the Discovery interface. Options for branding and look are very limited. Statistics are available for search and logins but do not contain full text retrievals or link clicks. |
| Customer Service and Technical Support (What types of customer and technical support are available for end user and administrator?) | Help option in EDS when students start first search. Help has a table of contents broken up by subjects. Help opens on the page with links to EBSCO Discovery Service Support Center available for end users. Support includes phone numbers, online form to submit a help request, support guides, and video tutorials. In addition, Librarians / | No help option in the product. Innovative, the parent company of Encore Synergy has a “Contact Us” option on their website where users can fill out a form for help or call a phone number. These options are for “innovative products or services”. There is no contact for customer support. | Help option in PRIMO when students start first search. The help option was linked to a LibGuide created by the institution. Customer Service option linked from the Ex Libris web page&gt; Contact Us&gt; About Us&gt; Customer Service. This option seems to be for admins and Librarians and covers all the Ex Libris products. | Help option in SUMMON is one page on search techniques. Support Center from ProQuest is the next option for Customer Support where customers can “Submit a Case” or Chat with a Support Representative M-F 8am-6pm ET. Resource seems to be for admins. SUMMON also has a LibGuide for users maintained by | No help option in the product. The Product Support is for Admins and Librarians. There is: Documentation Training FAQ Release notes Planned enhancements Contact Support by email or phone. |</p>
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<tr>
<td><strong>Cost</strong></td>
<td>Consortia Pricing. Yearly Subscription.</td>
<td>Encore Synergy is only available with the Sierra (Innovative Interface). The discovery service is an add on service to the ILS and the cost is inline with other products, but might be prohibitive for some colleges. Unless a college is looking to change their ILS, Encore Synergy would not be an option as it only works with Innovative’s Sierra. The price of this product would include the catalog price and be much higher than the stand alone discovery services.</td>
<td>Primo is only available with Ex Libris Alma. The discovery service is an add on service to the ILS and the cost is inline with other products, but might be prohibitive for some colleges. Unless a college is looking to change their ILS, Primo would not be an option as it appears to only works with Ex Libris Alma. The price of this product would include the catalog price and be much higher than the stand alone discovery services.</td>
<td>Consortia Pricing. Yearly Subscription. One time implementation fee. Serial Solutions Summon bundle includes: 360 Core, 360 Link, and Summon Discovery Service. Cost is based on FTEs and available in three tiers. The implementation fee is tiered as well. The cost is inline with other products of this nature, but might be prohibitive for some.</td>
<td>Worldcat Discovery is only available with the Worldshare ILS. The catalog includes Collection Manager (KnowledgeBase, link checker to collections, etc.) and the Meta-search portions of the Worldcat Discovery interface. Unless a college is looking to change their ILS, Worldcat Discovery would not be an option as it only works with the Worldcat Catalog. The price of this product is based on the catalog price and much higher than the stand alone discovery services.</td>
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Screenshots and Search

**EBSCO Discovery Service (EDS) - Screenshots and Search**

EBSCO Discovery Service’s (EDS) **Basic Search** starts off with a single screen with option of doing a keyword (default), title or author search. There is an autocomplete feature which helps the user identify other related terms and helps reduce typing effort. Search Options are clearly presented via Search Modes and expanders such as for Boolean phrase and SmartText Searching where one can put more than a word and the system runs the search in the citation abstracts or article title if the abstract is not available. Results may be limited to local collection, location, scholarly (peer-reviewed journals), journal name, full-text, date of publication, image quick view types, language, and “Only show content I can access.” The **Advanced Search** screen is typical with most of discovery systems in a guided-style field interface as the user simply chooses a field from a drop down list. Boolean operators are available to combine search terms.

The left column of the Results List screen is **Refine Results** where a user can revise search by applying limiters and expanders such as by local collection, full-text, and scholarly materials, etc. With each facet chosen one can see the number of results retrieved. Looking at the Results, it starts off with a Research Starter (an optional feature) which is an article from an encyclopedia, mostly from Salem Press Encyclopedia to give users a general overview of the topic. Clicking on the title displays a corresponding detailed record. Abstracts are mostly available on the articles retrieved. EDS has save, print, email, export and citation features. One can create personal Folders (My EBSCOhost) for saving searches and results across
sessions. There is a Search History feature where searches performed may be found where you can combine recent searches and retrieve previous searches save in your personal Folders.

Basic Search

![Basic Search Interface]

Advanced Search

![Advanced Search Interface]
Encore Synergy - Screenshots and Search

Basic search screen has a Google-like feel with a single search box. The Advanced Search screen has guided search fields but limited to title, subject and author fields as what you can find on the basic search screen options of EBSCO’s discovery service (EDS). A user can combine concepts by using Boolean operators (and, or, not). Format options are available (see screenshot).

Results may be arranged by relevance, date or title. Clicking on a title gives detailed information on the item. Search results can be refined by availability, format, location, language and tags. To choose a facet, you have to click on the wording itself. Also on the left column are Related Searches. Further down the column are Recent Searches and Recently Viewed materials. Citations may be collected in a cart (My Book Cart) or email.

ARTICLES Search Tab
There is a separate tab for searching Articles. The left column of the Results list screen has databases listed A-Z with corresponding number that indicates the result found in the database. Users can further refine their search on EBSCOhost’s Academic Search Premier by full-text, peer-reviewed, subject, thesaurus term, publication title, company and NAICS/Industry.
Basic Search

Advanced Search
PRIMO (ExLibris) - Screenshots and Search

A clean one search box is what you will see on the Basic Search. If one types in multiple words, Primo will return results that contain all of the specified terms. When using the Advanced Search, two choices from the drop down menus have to be made before typing up the search term. First is the drop down menu for limiting the term in the following fields: title, author, or subject. The second is the drop down menu for the
location/appearance of the term in the records: contains, is (exact), and starts with. Boolean operators in a dropdown menu may be easily chosen to connect terms. One can limit the search by Publication date by year and range of specific dates, material type and language.

Browse Search in Primo is the library’s online catalog. A unique feature is the Virtual (shelf) Browse, where a user is taken to a virtual bookshelf to browse forward and backward through items in the library’s local collection so users won’t miss invaluable resources.

On the Results List screen, numerous facets (such as resource type, creator, publication date -with a very convenient slider feature, genre, journal title, language) and probably has the most compared with other discovery services, are available on the left column to further refine search. Once a user clicks on “More”, located at the end of each facet, a pop-up screen would allow the user to include or exclude items in the facets.

There is an E-shelf feature which allows the user to rerun saved searches, request notification by email or via RSS of new results for a saved query, one just has to create an account or login for items to be saved permanently.

Basic Search

![Basic Search](image)

Advanced Search

![Advanced Search](image)

Browse Search

![Browse Search](image)
Summon (Proquest) - Screenshots and Search

Summon’s Basic Search provides an autocomplete feature which predicts the word that a user is typing in. The Advanced Search has fields to choose from (see screenshot). Boolean options feature is a typical drop down menu to connect the terms. Search may be limited to publication date range, content type, language, full text, scholarly materials, and library catalog items only. In addition, certain formats may be excluded and allows one to expand results to more than the library’s collection.

The result list screen has 3-column layout. The right column contains an entry from a reference material to give user an overview of the topic. Below the reference entry are links to Related Topics. The left column has facets to modify one’s search term by content type, publication date, subject terms, language, and library location. Limiting result by Discipline is unique compared to other discovery services. Take note that search facets are customizable by enabling/disabling options at the back end. One finds the result in the center column. Hovering on the title, instead of clicking, displays the abstract and citation information on the right column replacing the reference entry. Read Online, Cite and Email tabs are available features on top of the abstract to retrieve the article. A free RefWorks account may be established to store saved searches permanently.

Basic Search
Advanced Search

Start your research

Find books, journals, and more

Search

Publication date range: from to

Show content type:
- Any Type
- Audio Recording
- Book / eBook

Language:

Show only:
- Items with full text online
- Scholarly materials, including peer-reviewed
- Items in the library catalog (includes mostly print and physical material)

Exclude from results:
- Newspaper articles
- Book reviews
- Dissertations

Expand your results:
- Include results from outside your library's collection
**WorldCat Local Discovery - Screenshots and Search**

WorldCat Local has one box Basic Search interface. The Advanced Search has a variety of search fields users can choose from. Note that Worldcat added the term “phrase” in major fields (ex. author phrase, source phrase, language phrase) making them as field options. Users can limit search by content, formats, publication year and location, including Libraries Worldwide. Also, on the Advanced Search screen users can deselect from the default databases. Database groups may also be configured at the back end.

The Result List has 2 columns. The left one is a column to modify results which seems to be standard location among the Discovery Services. Note that facets may be further subdivided into specific fields which creates or presents a long list. Users can limit result by content, format, date, databases, publication year, language, location and author. Clicking a title on the result list leads to source information, including libraries’ catalogs nearby. Items in the search results will include icons for users to quickly add records to a list, email a record or a list of records, copy a record link, or export a citation.

Basic Search

```
Search Below to Find Books and More
```

Advanced Search
Discovery Searching "Showdown"

Note—please keep in mind there are many variables in place including: 1. Customization decisions of an institution 2. The issues of Open URL compliancy of products out there (that either may be based on the linking aspect of the product or the linked vendor product, itself) 3. The metadata or other aspects that a competitive vendor may suppress to certain discovery systems. 4. That if separate from the ILS, the catalog itself may have certain linking features to ebooks distinct from the discovery vendor, itself. Given that, the review team believed it was still crucial to perform this test just to get some ideas of the searching experience for each product.

### Search #1: Climate Change

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<thead>
<tr>
<th>EDS</th>
<th>Encore Synergy</th>
<th>Primo</th>
<th>Summon</th>
<th>Worldcat Discovery</th>
</tr>
</thead>
<tbody>
<tr>
<td># of results</td>
<td>703,159</td>
<td>263 (books &amp; ebooks), 235,199 (academic Search Premier)</td>
<td>981,826</td>
<td>4,228,046</td>
</tr>
<tr>
<td>Relevance</td>
<td>Books listed first, very relevant</td>
<td>Very relevant</td>
<td>Very relevant, all mixed (articles show up on first screen)</td>
<td>Very relevant, but words always appear in the title</td>
</tr>
<tr>
<td>Databases or Links to Them Listed First (after Catalog)</td>
<td>GVRL (first entry by book title, link coming from library catalog), Environment Complete, Business Source Complete</td>
<td>GVRL (first entry by book title), eBook Collection (EBSCOhost), self-identified databases (Academic Search Premier is the default under articles)</td>
<td>EBSCOhost databases, Films on Demand, Ebrary Academic Complete, public WWW (quality). EBSCOhost (no direct link), Academic OneFile, ProQuest Educational Journals (mostly ProQuest on first screens). If I limit to full text online ProQuest especially dominates on the first screen.</td>
<td>Ebooks come first (Gale Virtual Reference Library, Infobase eBooks, EBSCOhost Ebook Collection, Ebrary). First page had false drops/links to Hathi Public Trust (turns out is in one of Library's databases, but link did not appear). Of articles, EBSCOhost databases populate the list, Gale databases by third list of results (Biography In Context, Literature Resource Center)</td>
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<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Databases or Links to Them Buried (Not Seen in First 2-3 Result Pages)</td>
<td>Sage (#53), ScienceDirect (starting at #95), Opposing Viewpoints in Context, JSTOR, LexisNexis Academic, etc.</td>
<td>As Synergy goes to individual databases as a filter, this is not applicable.</td>
<td>JSTOR (#42), ScienceDirect</td>
<td>Westlaw, Gale Virtual Reference Library, Science InContext, most EBSCOhost databases</td>
</tr>
<tr>
<td>Databases or Links to Them Not Listed At All (Note: Reasons can include lack of agreement between vendors, or vendor does not have its content be open URL compliant)</td>
<td>CQ Researcher, Films on Demand, ProQuest eBook Central, CountryWatch</td>
<td>As Synergy goes to individual databases as a filter, this is not applicable.</td>
<td>Appears to have limited &quot;collections&quot;, so no article databases listed as a limiter (on the left there are limiters to Films on Demand, eBooks. Oddly enough only 1 result to Gale Virtual Reference Library. DId not see any Firstsearch or CQ Researcher, for sure.</td>
<td>CQ Researcher, CountryWatch, JSTOR, Project MUSE, Infobase Publishing (Issues and Controversies), Films on Demand</td>
</tr>
<tr>
<td>Link to Article Most Often?</td>
<td>Yes to most. GVRL links to ARTICLE level, but No to the following: Informlit (leads to Link to Ebook at book level, articles have PDF that usually works (Gale ones do not</td>
<td>At the intermediary level. Sometimes an error screen comes up after SFX gateway.</td>
<td>About 40% of the time directly to article. Never for EBSCOhost articles. Either a 360 Link record</td>
<td>If to an Ebook, 99% of the time successfully links, but always at book level. For articles around 55% of the time. Otherwise goes to</td>
</tr>
<tr>
<td>Leads to Subject Terms?</td>
<td>Google results, Error screen on SciTechConnect, Infotrac (search results matching search term), Opposing Viewpoints (sometimes--goes to search results or error screen), GPO leads to error screens, CGI error screens for some free open access content, Pubmed (search results), LexisNexis Academic (introductory search screen with a citation term entered), always connect), article links go to article but sometimes screen appears strange.</td>
<td>or have to reproduce search in EBSCOhost. Sometimes even ProQuest articles go to the 360 Link record. Most of the time the 360 Link does not go to article level and goes to the search screen of the database instead. Sometimes goes to an error screen from the database. Westlaw will not authenticate through the system.</td>
<td>journal/magazine level, search screen, or search results (search reproduced). Occasional error screen in a database.</td>
<td></td>
</tr>
<tr>
<td>Full Text limiter works as it should?</td>
<td>&quot;Only Show Content I can Access&quot; (Library's Collection)--appears to do the trick better than the separate Full Text limiter. Online. Yes.Do not see any E-titles (ebooks/articles) eliminated with full text limiter.</td>
<td>Review team did not have authentication rights to the Library's databases, so unknown.</td>
<td>Yes.</td>
<td></td>
</tr>
</tbody>
</table>
### Comparison

**Council of Chief Librarians Electronic Access & Resources Committee**

table

| Noteworthy | Able to limit by TYPE of article (newspaper, magazine, journal, etc.) in left column as well as indexing subject terms by EBSCO that sometimes include other databases such as Gale. | Able to limit by TYPE of article (newspaper, magazine, journal, etc.) Database recommendation was appropriate (GreenFile) listed on top. | some of the full text items that even are searched publicly get eliminated. So much so, it's safe to say at least 50% is eliminated |

#### Search #2: Futurologists

<table>
<thead>
<tr>
<th>EDS</th>
<th>Encore Synergy</th>
<th>Primo</th>
<th>Summon</th>
<th>Worldcat Discovery</th>
</tr>
</thead>
<tbody>
<tr>
<td># of results</td>
<td>3,439</td>
<td>0 for books and ebooks, 1036 for Academic Search Premier</td>
<td>122</td>
<td>8309, need to limit to Library catalog to find books</td>
</tr>
<tr>
<td>Relevance</td>
<td>Relevant, but no books appeared. Needed other search terms to find books.</td>
<td>No books. Not really relevant after first three. Occasional relevancy after. Biography In Context only to articles so not really relevant. In fact, hardly relevant or fruitful in any of these databases (closest was Academic Search Premier).</td>
<td>3 books, so articles dominated, but one relevant book showed up as item #2. Very relevant.</td>
<td>Very relevant. Words focused of what's in the title.</td>
</tr>
<tr>
<td>Databases or Links to Them Listed First (after Catalog)</td>
<td>EBSCOhost databases (Business Source Complete, MasterFILE Premier, Environment Complete, SocIndex with Full Text), one</td>
<td>See Above.</td>
<td>EBSCOhost databases (general set), ABI/Inform (ProQuest), Ebrary College Complete, LexisNexis Academic, JSTOR (page 2 of Science InContext, ProQuest Health and Medical Complete, JSTOR, Academic OneFile, Academic Search Complete (via 360Link), ProQuest Newsstand.</td>
<td>eBook Collection (EBSCOhost), false drop to a periodical citation (1994 citation when library only has previous year. Result #3, false drop in Biography In Context</td>
</tr>
<tr>
<td>Databases or Links to Them</td>
<td>Buried Opposing Viewpoints in Context (54 articles), JSTOR, LexisNexis Academic</td>
<td>See Above.</td>
<td>ScienceDirect, Sage, Emerald, Films on Demand</td>
<td>Ebrary, Catalog (books), most EBSCOhost databases (though a few did show up higher in this search such as the ones on the left)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------</td>
<td>------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Databases or Links to them</td>
<td>Not Listed At All See Above</td>
<td>See Above</td>
<td>See Above</td>
<td>See Above</td>
</tr>
<tr>
<td>Link to Article Always?</td>
<td>See Above</td>
<td>See Above</td>
<td>See Above</td>
<td>Maybe day was off for climate change as I more often linked to article for EBSCO and others. Still sometimes ended up on error page or search page.</td>
</tr>
<tr>
<td>Leads to Subject Terms?</td>
<td>On the side is futurologists, forecasting and technological innovations. Granted student may need to be more specific if they were looking for human evolution or cyborgs. New search (or clicking on a</td>
<td>&quot;Did you mean Pathologists?&quot; It asked. Not helpful at all.</td>
<td>Need to go to Details to discover subject headings (buried). In the left column--Topics: None were useful except for Economic Conditions and Forecasts</td>
<td>Disciplines not exactly helpful (outside of business)-left column. Subjects such as forecasts and forecasting may show up in records showing up on the right for each selected for glancing. Not as fruitful as EBSCO or Primo.</td>
</tr>
</tbody>
</table>

Sage on first two pages of entries. ProQuest Newsstand and International Newspapers (page 2)

ProQuest Education Journals, LexisNexis Academic, SocIndex with Full Text

(#4)–listed bunches of articles not that one in a results list, error screen from Biography In Context #5). No result from Academic search Premier (#6).LexisNexis (#7 and #8--link to article worked) #9 not full text at all (though sort of claimed MasterFile Premier. Probably not a matching year).
### Screenshots and the Administrative Interface

Note: At this time, the review team only had the opportunity to view and evaluate three administrative interfaces. Most comments about them are described in the comparison grid at the beginning of this review.
EBSCOhost Discovery Services (EDS)

The EDS interface should be very familiar to those working with EBSCO’s regular Research databases. Customization features are very numerous with respect to look options of how results should be viewed, whether the user wants basic or advanced features as default. The Holdings Management and Local Collections are where information of key database collections and eBooks are inputted for the Discovery system to search. There are little customization features for determining how results would be prioritized between databases. The separate Full Text Finder feature, which is usually included with an EDS subscription will determine further linking to databases (only here can non-cooperative vendors such as ProQuest can be included). Note: since 2013, EBSCO has an arrangement to search the index of most Gale databases including Academic OneFile, Literature Resource Center, and GVRL, although not all (LCO has yet to be added).

Branding features include some good options of word choice and determination of look and feel of the searching experience. Branding can include the header and footer features, colors, font style, etc. that can match your website’s look and feel. Many widgets can be inserted on the right side or can appear as a placard on top of the search results page (the usual default placard is the “Research Starter” entry if the librarian has selected it as a “database” – an encyclopedia passage (general or subject) that may appear depending on the user’s search terms.

Given that, options are not as numerous for different circumstances as they are in Summon, unless the institution chooses to subscribe to the additional EBSCO Apps and Cloud services. Given that, compared to WMS Discovery, there’s a lot more room for determining the brand and look/feel compared to Worldshare.
Worldshare Administrative Interface

In Worldshare, you manage your databases in its Collection Manager. Many databases’ collections (such as some EBSCOhost databases, though not all) can be looked up and added into the Library’s catalog. If a collection is not here, the librarian can request the vendor to provide compatible spreadsheets called KBART files where the librarian can then add (although the librarian will then need to request the vendor for updates from their end).

Once the librarian selects a collection, the librarian can then view each individual title, choose to omit any titles if they wish, and add individual titles when needed (such as Gale Virtual Reference Library when the library makes a new acquisition).
In Worldshare’s Configuration interface, the Librarian selects the databases that can be cross-searched in the Worldshare platform. The librarian selects the Add/Remove databases when the Library’s suite changes, or if a database service a Library already subscribes has since been added into the OCLC system.

Once the librarian selects Add/drop database, the librarian can then select the databases, which once selected will appear in the right “Selected databases” column. Those databases marked with an asterisk can only be cross-searched in the Discovery platform once the user provides authentication credentials.
**Summon**

The Summon editor provides ample options for customization of look and feel. The most often being used would be the Settings tab where selections such as the databases being searched, logos (including three sizes for how it would appear in different circumstances), URL for home pages, facets (determining what fields will appear and in what order in the records retrieved) and chat widgets are made. One unique option not available in the other search interfaces is selecting the language options of the interface. Another is with ProQuest’s cooperation with Springshare key areas in the interface allow the librarian to put in URL’s and coding that work with Libguides easily (likewise the librarian can submit their Serials Solutions data into Libguides for their Databases A to Z list). Two challenges for the librarian include a very slow speed for the Settings page (and most administrative pages) to load and a minimum of 24 hours for a change to occur (with no preview option). By contrast, Worldshare and EDS changes happen much sooner (often within minutes) and in EDS the librarian can preview changes.

**Summary of Shared Concerns**

Numerous issues were described that are common for all discovery solutions, including:

- Link revolvers not resolving (granted this problem can rest with either the vendor providing the link resolving, the vendor being linked or the failure of frequent enough updates between the two vendors. For example, LexisNexis tends to have a very frequent OpenURL failure rate)
- Uneven content neutrality/relevance ranking
- Uneven database/content integration support
- Immature or non-existing course reserve modules (except OCLC’s Worldcat Local/Discovery)
● Delay in catalog record updates appearing live (except OCLC’s Worldcat Local/Discovery and Innovative’s Synergy)
● Known item searches can be surprisingly difficult with all products. It should be noted that with Innovative’s Synergy, known item searches for book and media records in the catalog are quite good, with the most relevant items appearing at the top of results
● Call number browse not supported
● System response downtime, especially during peak times or heavy demand (e.g. lots of integrated databases).
● Substantial tech support requirements (e.g. staff resources) for implementation and maintenance, including regular updates to sync the discovery solution with the underlying ILS (except OCLC, because they’re closely linked)
● Discovery not quickly adopted or embraced by librarians or patrons

**Conclusion**

The review of Discovery products in Spring 2016 proved to be more difficult than first anticipated. Some products were true Discovery Services while other products were linked to ILS systems and would only work if an institution had that ILS system. Content suppression among competing vendors created problems in ranking coupled with some content not showing up at all based on indexing issues between vendors. Each system is highly customizable and the reviewers were sometimes left wondering if the product was designed a certain way or if an institution had set it up a certain way. All of these variables made it difficult to have a true comparison of Discovery Systems, but the reviewers did the best they could with what they had. With that being said, there was no Discovery Service that outranked the other. There were a lot of issues discussed (SEE: Summary of Shared Concerns above) and it seemed that Discovery Services have room to grow. Institutions considering a Discovery Service are encouraged to look at this review, the notes from the CCL-EAR Discovery Services meeting on 2/4/2-16 and the CCL-EAR survey results as well as their own institutions ILS and other products. We hope these resources can be a guide when considering a Discovery Service. We would also encourage Institutions to reach out to other colleges using Discovery Services for more detailed information.

**Other Reviews**

Bibliography