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Customization of Web-Scale Discovery Tools in Alabama's Public & Independent College and University Libraries: A Longitudinal Study

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TRACKING CUSTOMIZATIONS OF
WEB-SCALED DISCOVERY TOOLS IN
ALABAMA'S PUBLIC & INDEPENDENT
COLLEGES AND UNIVERSITY LIBRAIRES:
A LONGITUDINAL STUDY

by

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Abstract

   This longitudinal survey of the library websites of sixteen Alabama senior universities tracks customizations done to these libraries' web-scale discovery tools over a twenty-one month period. The findings of this survey could serve as reference points that could benefit libraries who have had web-scale discovery for some time as well as libraries considering purchase of web-scale discovery.

Keywords: Web-Scale discovery, customizations academic libraries, Alabama

Introduction

        Once digital technology had developed to a point that electronic searching

for information became practical, librarians began a quest for the Holy Grail of a single-

search option that had the potential to harvest search results from the entirety of a

library's holdings. Initially it was hoped that federated searching might prove to be this

option, but federated searching was found to be unequal to the task. Response time was

slow and could skew relevance rankings (Thompson, 2013). Further, the first

generation of federated search engines proved not nearly capable of searching the totality of a

library's holdings. Something more was needed. That something more was Web-scale

discovery.

         Web-scale discovery is defined as a pre-harvested central index tool coupled with a richly

featured discovery layer providing a single search across a library's local, open access, and

subscription collections (Hoeppner, 2012). Developed and marketed by multiple library vendors,

it is a federated solution designed to "simultaneously search, retrieve and adequately display

content from various remote information hosts -- such as abstracting and indexing and full-text databases" (Vaughan, 2011, p. 6) by using a Google-like search box. Currently, five leading web-scale discovery products are used in participating academic libraries: EBSCO Discovery Services, abbreviated as EDS, which was onset since 2010; Innovative Interfaces Encore Synergy onset since 2010 (now called "Encore Discovery Solution"); Primo from ExLibris, onset since 2010 (now called "Primo Discovery"); Summon from Serials Solutions, onset since 2009 (now called "The Summon Service from ProQuest"); and WorldCat Local from OCLC, onset since 2007 (now called "WorldCat Discovery Services").

The appeal of Web-scale discovery tools (WSDT) has generated great awareness in academic libraries. Following the University of Washington's participation in the first pilot program for OCLC's WorldCat Local in 2007 (Thomas & Buck, 2010)and the first initiative (the Open Discovery Initiative) that was introduced at the American Library Association's annual conference in June 2011, college and university libraries have investigated what WSDTs are and how they work. Higher education institutions, including many in the State of Alabama, have adopted discovery tools for their libraries.

WSD's potential to revolutionize library information retrieval has prompted both great hopes and great concerns. The possibility of having at last found the true Grail is tempered by previous disappointments and the frustrations of unrealized expectations. Even though WSDTs no longer can be viewed as the "new kid on the block," for libraries who are in the process of adopting them, they still are. In his "Library Systems Report 2015," which appeared in the May 2015 issue of *American Libraries*, Marshall Breeding reports that WSD vendors such as EX Libris and Innovative still are signing (and in some cases losing to a competitor) contracts for their Discovery platforms, with EBSCO's EDS boasting the largest increases: 2,634 new

subscriptions and 8,246 total installations (Breeding, 2015, 36). As these libraries prepare their new Web-scale discovery tools for launch, they will need to achieve the same objectives and resolve the same tensions as WSD subscribers before them if they are to get the best return on their (considerable) WSD investment. Foremost among these are getting beyond the limitations of the out-of-the box templates offered by WSD vendors and tailoring the tools to the needs of their own campuses and stakeholders. While the templates do provide a functioning Web-scale discovery tool, their generic nature does little to satisfy other concerns. This is where customization comes in.

Literature Review

Research related to WSD largely dates from 2012. Most articles published in 2012 focused on products comparison and evaluation, while usability tests and articles on the implementation of a specific product began appearing during the first quarter of the year 2013. More recent research has continued this pattern, although the journal scholarship has been complemented with the publication of books such as Mary Pagliero Popp's *Planning and Implementing Resource Discovery Tools in Academic* Libraries (2012) and JoLinda Thompson's *Implementing Web-Scale Discovery Services: A Practical Guide for Librarians* (2014).

Since Web-scale discovery provides central indexing to a large amount of information both locally and remotely, a search easily could yield millions of results. To not customize WSDTs could frustrate users' efforts to know what resources they are searching and how to search them effectively. Little on WSDT customizations can be found in the published literature, although the necessity of customizations was suggested by Jody Condit Fagan (2012) and her colleagues from James Madison University in their research article "Usability Test Results for a Discovery Tool in an Academic Library," published in *Information Technology and Libraries*,

March 2012. Needed best practices was suggested by Michael Kelley (2012) in his article

entitled "Coming into Focus: Web-scale Discovery Services Face Growing Need for Best

Practices," published in the October 15, 2012 issue of *Library Journal*.

<u>Methodology</u>

   Various methods can be used to identify WSD customizations. Content analysis was selected

for this study since it allows data collection from a variety of participants, which is ideal for a

qualitative study of WSD customizations. Library websites of sixteen Alabama senior

institutions with Web-scale discovery services were selected for this study. All data were

collected over a twenty-one month period from June 2013 through February 2016.

        Customization is defined as to modify or build according to individual or personal

specifications or preferences, while WSD customization as used here refers to the practices and

efforts made to enable users to effectively search WSDTs according to their own requirements.

These customizations are different from configurations, defined here as the setting of various

switches and jumpers (for hardware) or defining the values of parameters (for software) for a

new device or program. After an initial perusal of each library's page, among the WSD

customizations examined were:

- What Web-scale discovery service was used (WSD Vendor).

- Where the customizations could be found (WSD Customization Location).

- What customizations have been done (Contents of Customizations).

   This study examines the library websites of sixteen Alabama senior institutions in order to

identify trends in customizing web-scale discovery services. By examining WSD practices in the

surveyed libraries, the study hopes to provide guidelines for libraries considering purchase of a

discovery service as well as serve as a point of reference for future developments in existing services for libraries already subscribing to a WSDT.

The customizations considered fall broadly under the two rubrics of "where it's at" -- the context and placement of the WSD search box and what surrounds it -- and "what it's for" -- customizations such as naming, alternative search options, clarifying text or user guides. Due to limitations imposed by remote access restrictions, this survey limits itself mostly to analysis of the WSD landing screens of the sampled libraries; in-depth analysis of customizations done to search results or following screens for many libraries was not possible. A table is used to display the data collected from each library. Screen shots from several library webpages also are provided for visual assessment.

<u>Analysis of Data</u>

In the following Table of customizations of web-scale discovery tools (WSDT) in Alabama senior institution libraries, the first four columns record data collected beginning June 2013; the fifth column lists changes made since that date. Among the things looked at are the following:

1) Name (if any) of the web-scale discovery tool (WSDT);

2) Placement of WSDT;

3) Display/Interface of WSDT;

4) Context (surroundings) of WSDT

- panes and facets

- buttons, checkboxes, links, tabs;

5) Scope of WSDT (what is searched and not searched);

6) User aids or guides for WSDT.

WSD Vendor: This column of the Table lists the Web-scale discovery service vendor used by libraries at the senior institutions of Alabama, as of June 2013 when this study was begun. Out of sixteen surveyed libraries, one (Athens State University Library) used Innovative Encore Synergy, one (Troy University Library) used Serials Solutions Summon, five (Alabama State University Library, Huntingdon College Library, Spring Hill College Library, University of Alabama Birmingham Library, University of Montevallo Library) used OCLC WorldCat Local, and nine (Auburn Montgomery Library, Birmingham-Southern College Library, Jacksonville State University Library, Samford University Library, The University of Alabama Library, University of Alabama Huntsville Library, University of North Alabama Library, University of South Alabama Library, University of West Alabama Library) used EBSCO Discovery Service.

WSD Customization Location: This column indicates where customizations can be found: either from the Library webpage where the WSD search box is located (fifteen out of sixteen libraries' WSD search boxes are on the Library Homepage) or on the initial WSD search results page. The customizations might take the form of a link or links to further information, or be a statement explaining WSD.

Contents of Customizations: This column demonstrates a variety of customization practices employed by the surveyed libraries. These include but are not limited to:

1) Providing a customized name for the WSDT: Names such as Multi-Search (Auburn Montgomery Library), Everything (Spring Hill College Library), ALL (Troy University Library), OneSearch (University of Alabama Huntsville, University of South Alabama) and Scout (The University of Alabama) are used to better clarify the function or purpose of the WSDT or to represent the university brand.

2) Providing a concise explanation to accompany the WSD search box. This brief explanation usually takes the form of a "scope note" that makes users aware of the contents and coverage accessible through the WSDT. Some examples of these concise explanations are:

Multi-Search lets you find books, articles & other research materials from a single search box (Auburn Montgomery Library);

Use the Discovery System to search across multiple databases and the catalog (Birmingham Southern College Library);

Find articles, books, primary sources, media and more in one search! (University of North Alabama Library);

EBSCO Discovery Service (EDS) is an online research tool that pulls together almost all of our Library resources so that they can be explored using a single search box (University of West Alabama Library).

3) Providing more than one search option by using drop-down selections:

Users can select either "UAB and Libraries Worldwide" or "UAB –Mervyn H. Sterne Library" search options from the drop-down box on the Homepage resources to start the search (University of Alabama at Birmingham Library);

Users can select either "Libraries Worldwide" or "Carmichael Library" search options from the drop-down box on the Homepage resources to start the search (University of Montevallo Library).

4) Providing further detailed information about WSD including answers to questions such as: What is it? When should I use it? When should I NOT use it? (Auburn Montgomery

Library, Birmingham Southern College Library, Troy University Library, University of

South Alabama Library).

5) Providing a step-by-step search demo with screen shots or video tutorial (Birmingham

Southern College Library, Troy University Library, University of Montevallo Library,

University of South Alabama Library).

Table: Customizations of Web-Scale Discovery (WSD) Tool in Alabama Senior Institution Libraries *

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
Alabama State University http://www.lib.alasu.edu/	OCLC WorldCat Local	Explanations on the Homepage. Explanation on the search result page.	Explanation on the Homepage: Search Alabama State University Library and beyond. Explanation on the Search Result page: About WorldCat and Alabama State University Library.	Explanation placed under About WorldCat drop-down menu on Search Result page.
Athens State University http://www.athens.edu/library/	Innovative Encore Synergy	Name. Link to video instructions from the Homepage under WSD search box.	New name: Encore. Link to Video instructions, the content of the video includes: Search Demo; Search strategies; Search results; Log in for full-text access; Spell-correction function;	Name changed to Discovery Service (new vendor: EBSCOhost) and then subsequently removed in favor of single search box under slogan Find Books and Articles. LibGuide including standard EBSCO explanation of EDS with link to video tutorial

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
			Contact information.	(not customized). Box placed on What's New page with link to standard EBSCO Discovery service video tutorial. Search box retained on home page; Explanatory matter moved to LibGuide linked to "What's New" hyperlink on Homepage, with no EDS search box on LibGuide. LibGuide subsequently removed.
Auburn Montgomery http://aumnicat.aum.edu/	EBSCO Discovery Service	Name. Explanation on the Homepage. Link to "Learn more about Multi-search" from the Homepage.	New name: Multi-Search. Explanation on the Homepage: Multi-Search lets you find books, articles & other research materials from a single search box. Link to "Learn more about Multi-Search": What is Multi-search When should I use Multi-Search? When should I NOT use Multi-Search?	Explanation changed to: Find books, articles & other research materials using Multi-Search. Link removed; content migrated to LibGuide "Multi-Search Service." LibGuide subsequently moved some mouse clicks in from Homepage.
Birmingham-Southern College http://library.bsc.edu/	EBSCO Discovery Service	Explanation on the Homepage.	Explanation: Use the Discovery System to search across multiple databases and the catalog.	

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
		button from the Homepage above WSD search box.	button links to the "Discovery System at the BSC Library" page. The page includes following tabs and contents: Introduction tab: What is the discovery system? When should I use the Discovery System? When should I NOT use the discovery system? Contact information Search Results tab: screen-shots for basic and advanced searches with explanation on expected results Video access tab:(the video currently not available) Mobile access tab: provides step-by-step instruction for mobile access Personalizing Discovery tab: provides information on how to set up a personal account, contact information also provided.	Button removed from Homepage; content and tabs migrated to LibGuide "Discovery System at the BSC Library." LibGuide subsequently removed.
Huntingdon College http://libguides.huntingdon.edu/website	OCLC WorldCat Local	Name. List on the Homepage. Explanation on the search Result page.	New name: OneSearch. List: Databases not currently discoverable through countess OneSearch. Explanation on the Search Result page:	Name changed to Countess OneSearch, with slogan in Countess QuikSearch box "Find items in Search Countess OneSearch by choosing from the following options; slogan "Find items in

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
			About WorldCat and Huntingdon College Houghton Memorial Library.	Countess OneSearch" relocated above search box. Explanation removed from Search Result page.
Jacksonville State University http://www.jsu.edu/library/index.html	EBSCO Discovery Service	Explanation on the library Homepage. ⓘ button on the Search Result page.	Explanation beneath the Discovery Search box: Discovery allows you to search across almost all library resources at the same time. ⓘ button on the Search Result page: Searching the Discovery Service (not customized).	Button now directs to Basic Search (not customized). Button subsequently removed; explanation restored beneath search box.
Samford University http://library.samford.edu/	EBSCO Discovery Service	Name. Explanation on the library Homepage. ⓘ button on the Search Result page.	New name: Multi-Search. Explanation on the library Homepage: Search across several databases and Samford Libraries Catalog to find articles, books, newspapers and more. ⓘ button on the Search Result page: Searching the Discovery Service by EDS.	Button now directs to tips for Basic Search or Advanced Search, depending on the type of search performed; button subsequently removed.
Spring Hill College http://libguides.shc.edu	OCLC WorldCat Local	Name.	New name: Everything.	

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
/burkelibrary		Explanation on the search result page.	Explanation on the Search Result page: About WorldCat and Spring Hill College.	Explanation removed from Search Result page. Slogan added: Search Spring Hill College and beyond.
Troy University http://trojan.troy.edu/library	Serials Solutions Summon	Name. Link from the homepage under "Help."	New name: ALL. Link to "Search Library Resources" page. The page includes following tabs and contents: About tab: provided answers to the questions: What is "search library resources"? What resources are available in "search Library Resources"? Unified Discovery Service video Basic Search tab: provided initial search demo with screen shots Accessing Text of Articles tab: provided refine search demo and how to access full text article with screen shots Accessing Text of ebooks tab: provided. information on how to access ebooks with screen shots FAQs tab: Provided answers to the following questions with screen shots: When should I use the "Search Library Resources" box? When should I avoid	Name has been removed. "Search Library Resources" link has been removed and content has been migrated to LibGuide with same title; Discovery Service video and all tabs except FAQs tab and feedback tab not included in migration; "All I wanted to find is books" and "Recommendations" questions not migrated into FAQs.

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
			using the "Search Library Resources" box? I couldn't find any relevant resources. What should I do? All I want to find is books. How can I do this? I sometimes see Recommendations at the top of my search results. What do they mean? Feedback tab: provided a survey form for users' feedback about the "Search Library Resources."	
The University of Alabama http://www.lib.ua.edu/libraries/gorgas/	EBSCO Discovery Service	Name. button on the Search Result page.	New name: Scout. Explanation in Search box: Books, full-text articles online, and more. button on the Search Result page: Searching the Discovery Service by EDS.	Library homepage completely redone: Scout search box removed and link placed under Research tools facet above library banner. Button now directs to tips for Basic Search or Advanced Search, depending on the type of search performed. Instructional videos now several mouse clicks in under Research Guides facet.
University of Alabama at Birmingham http://www.mhsl.uab.edu	OCLC WorldCat Local	Search options on the library Homepage.	Two search options from the drop-down box on the Homepage: UAB AND Libraries Worldwide; UAB –Mervyn H. Sterne	Caption above Search box: Search for books, DVDs, CDs, and other items in Sterne Library. Dropdown menu changed to search

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
		Explanation on the search result page.	Library. Explanation on the search result page: About WorldCat and UAB - Mervyn H. Sterne Library.	options such as keyword, journal, etc.; UAB and Libraries Worldwide options migrated to Search button at top of pane or tabs placed immediately above WSDT search pane. "About" explanation no longer present. Button w/questions added to hyperlinks beneath search box: ❓ How do I search for books? How do I search for journal articles? Additional Frequently Asked Questions
University of Alabama Huntsville http://www.uah.edu/library	EBSCO Discovery Service	Name. Explanation on the Homepage.	New name: OneSearch N/A for unauthorized users. Explanation on the Homepage: OneSearch: books, ebooks, articles, more.	Unauthorized users statement deleted. Explanation changed to OneSearch: books, articles, more.
University of Montevallo http://libguides.montevallo.edu/index	OCLC WorldCat Local	Search options on the library Homepage. Link to "What is WorldCat Local?" on the Homepage under the search box.	Two search options from the drop-down box on the Home page: Libraries Worldwide; Carmichael Library. Link to "What is WorldCat Local" page. The page included	Drop-down has been removed; "Search Worldcat Local Catalog" added above search box. "What is WorldCat Local" page has become a box among other

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
		Link to the Video Tutorial under the search box on the Homepage.	answers to the following questions: What is WorldCat Local? Do we still have all the Databases? What about the "old" Catalog? Is it still around? Single-search Access: What is Included? What can't I find in World Cat Local? My question isn't here, who should I contact about WorldCat Local? Video Tutorial by OCLC provides a video demo on: Basic Searching; Refine your search; Ranking of search results; Search by Library; Sorting your Search; Relevance Algorithm; Additional Resources.	boxes on a different page, but the questions and answers all migrated over. "What is WorldCat Local" box now is a LibGuide for Carmichael Technical Services, but clarifying questions and video tutorials have been retained.
University of North Alabama http://www.una.edu/library	EBSCO Discovery Service	Explanation on the library Homepage. ? button on the "Discovery Home" page. Link to "Learn more…"from the Homepage.	Explanation on the library Homepage: Find articles, books, primary sources, media and more in one search! ? button on the Search Result page: Searching the Discovery Service by EDS. Explanation on "EBSCO Discovery Service."	Explanation changed to: EBSCO Discovery integrates electronic database and library catalog records in an interface designed for power searching. Button removed. Explanation on "EBSCO Discovery Service" anchored to Learn more link . . . positioned

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
				above search box.
University of South Alabama http://library.southalabama.edu/	EBSCO Discovery Service	Name. "What am I searching?" Link from the Homepage.	New name: OneSearch. "What am I searching?" Link from the Homepage provided following tabs and contents: About OneSearch tab: provided answers to the following questions: what is OneSearch? When should I use OneSearch? When should I not use one search? Using OneSearch tab: provided step-by-step instruction on how to use OneSearch with screen captures; Ask a Librarian: provided contact information and FAQs.	Link has been condensed to "OneSearch is a one-stop solution for the discovery of books, journal articles, audio-visual materials and digital objects." Content formerly under "About OneSearch" tab has been migrated to LibGuide "OneSearch at USA Libraries: About OneSearch."
The University of West Alabama http://library.uwa.edu	EBSCO Discovery Service	Explanation on the homepage above the WSD search box.	Explanation on the homepage above the WSD search box: EBSCO Discovery Service (EDS) is an online research tool that pulls together almost all of our Library resources so that they can be explored using a single search box. In other words, rather than searching the Library Catalog for books and a database such as Academic	Name added: EBSCO Discovery for UWA. Explanation removed and replaced by checkboxes for Full Text, Peer Reviewed, Available in Library Collection, and UWA Library Catalog **Only.**

Library / Homepage Web Address	WSD Vendor	WSD Customization Location	Contents of Customizations: Customizations as of June 2013	Contents of Customizations: Customizations since June 2013
			Search Premier for journal articles, you can do an EDS search and get results which include books, e-books, and journal articles, all in one list.	

* Institution names accessed from Directory of Alabama Colleges and Universities page
http://www.ache.alabama.gov/Colleges&Universities/Directory.htm

Discussion

Libraries who have purchased a web-scale discovery service, and those who are considering doing so, have three principal reasons to customize their WSDTs:

1) To draw attention to the WSDT and make clear its connection to the sponsoring library or educational institution (location and branding);

2) To meet stakeholder needs (modifying the generic out-of-the-box templates to address local concerns);

3) To get the WSDT used (to justify and protect the investment in the WSDT).

These goals may be met through some combination of the following:

1) Name (if any) of the WSDT;

2) Placement of the WSDT;

3) Display/interface of the WSDT;

4) Context (surroundings) of the WSDT;

5) Scope of the WSDT (use-centric);

   a) options for both using and not using the WSDT (what is searched and not searched);

b) panes and facets;

c) buttons, checkboxes, links, tabs.

The importance of branding as a customization feature for WSD often is mentioned in the literature. Branding's objective is, as Jason Vaughan puts it, to allow "libraries to make the discovery service their own" (Vaughan, 2011, p. 51). Although the degree of openness and flexibility will vary depending on the WSDT used, the out-of-the-box template provided by most vendors usually permits at least a few client-specific modifications.

Assuming one is using the default template, the interfaces for the discovery services may look quite similar—a search box at top, results presented in the middle of the screen, and facets and other search refinements in a pane along the left. That said, there are some differences, and how significant those differences are can be determined only by the prospective library customer for its environment (Vaughan, 2011).

The library can customize various branding elements, such as colors and logos, and specify some layout details, such as the positions of logos. Libraries can choose to have a custom toolbar, which appears at the top of the interface (Vaughan, 2011). These, along with other customization possibilities, appear in Vaughan's complete Customization Checklist found on page 54 of his series of WSD reviews in the January 2011 issue of *Library Technology Reports*.

No matter how long it has been in place, every library's WSD begins as a new service/tool, and naturally libraries will want to draw users' attention to it. This is branding, and in this regard the business mantra of "location, location, location," is an important initial consideration of WSD customization: how is the space to be used? The landing or log-in screen is the user's first encounter with the WSDT's discovery layer, and is its public face (Hoeppner, 2012). One way

to direct users' focus to the WSDT is to present it in isolation with nothing else to compete for their attention (see Fig. 1).
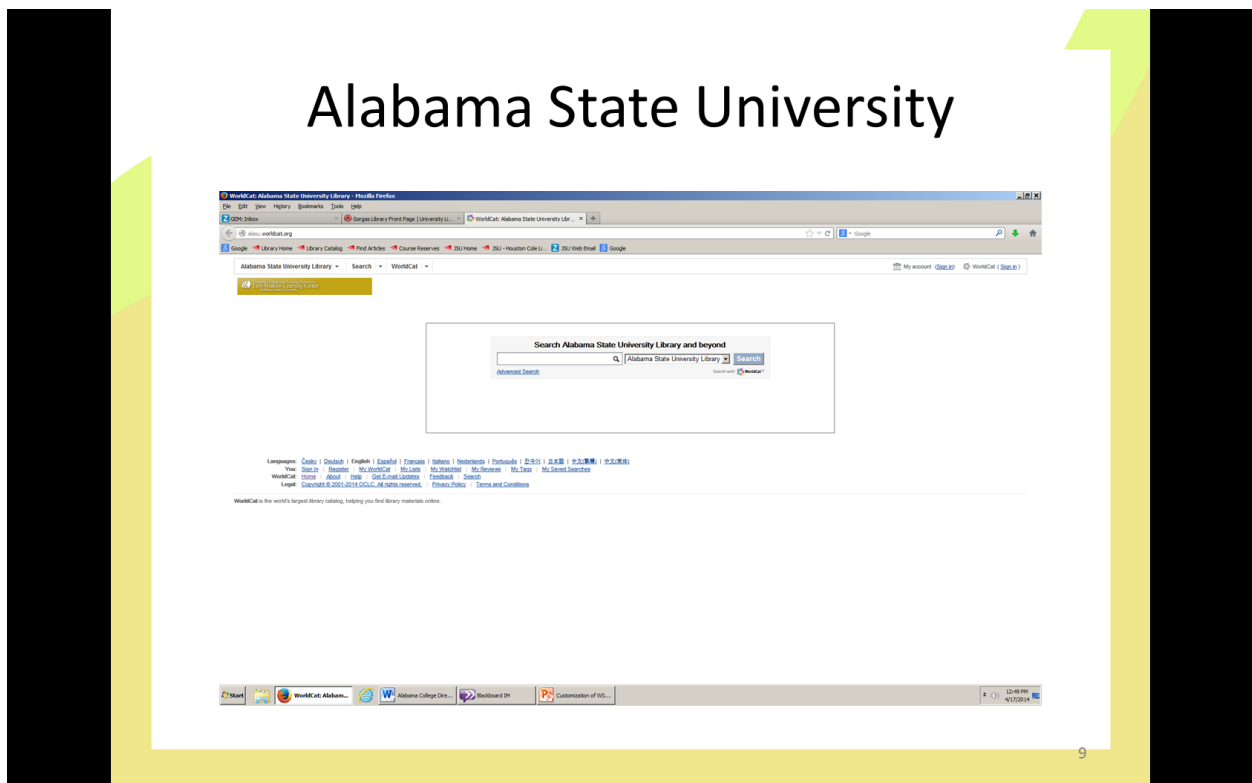
(Figure 1: Alabama State University library, WSDT landing screen, 2013)

Another approach, used by the University of Alabama's Gorgas Library, is to give the WSDT pride of place in a more elaborate display (see figure 2). Here, the WSDT is at the top of the wide center pane, embedded in an image. The size, position, and extensive use of color in the image draw the eye immediately to the WSDT box (see figure 2).
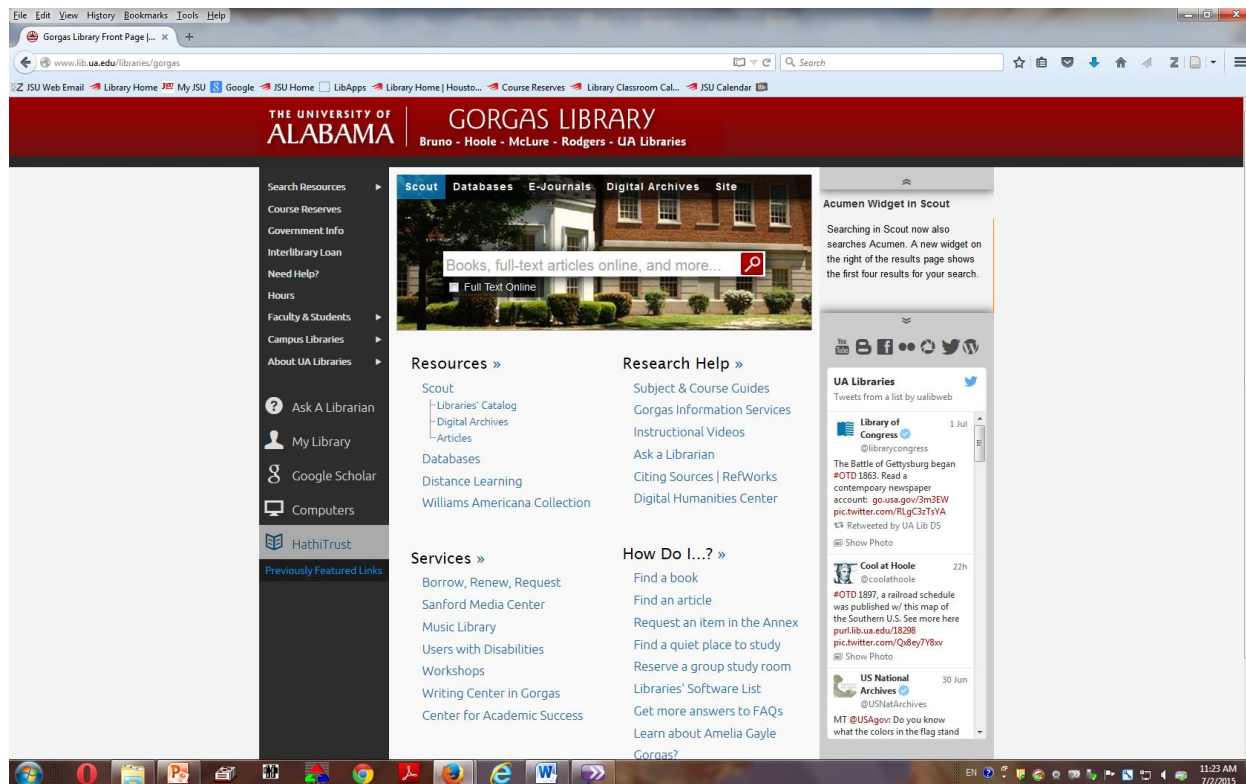
(Figure 2: University of Alabama library, landing screen, 2013)

Along with location, branding can influence users' "first impressions" through which the other components of the WSDT, including the core of the service, its central index, will be judged. Branding's potential to attract or repel strongly influences first impressions and therefore the degree of success of the WSDT.   Branding goes beyond mere location, as it brings into play such things as arrangement of the screen, use of color, and naming. Gorgas Library's WSDT box is embedded in a landing page that, though quite "busy" in terms of overall content, still is quite navigable. And to further attract users to its WSDT, Gorgas has even given it a name: Scout.

Another benefit of branding is that it enables libraries to customize the "look and feel" of their WSDT to both blend it with and set it apart from other components of their institutional context; an attempt at conflict resolution by demonstrating that though the WSDT is like, being

part of the parent institution, it also (by being new) is different. Libraries can brand their WSDT with the library's name and logo or go beyond (Vaughan, 2011), as the University of South Alabama has (see Fig. 3).

(Figure 3: University of South Alabama, WSDT landing screen with instructional link, 2013)

The Houghton Memorial Library of Alabama's Huntington College achieved the trifecta in this regard, first by presenting the box for their WSDT on their LibGuide homepage as well as the page itself in their University's colors, and then not only naming their WSDT but giving it a name, Countess OneSearch, which resonates with the school's history (see Fig. 4).

(Figure 4: Huntingdon College, landing screen/LibGuide, 2013)

Though not an Alabama library and therefore not included in this survey, the Himmelfarb Health Sciences Library of The George Washington University confronted perhaps the highest degree of difficulty a problem of this nature can offer and one which illustrates the degree of conflict resolution required to satisfy seemingly conflicting mandates when it comes to branding.

One of the most difficult parts of the configuration process was the branding and interface design. . . .   Due to University restrictions regarding logos and strict policies governing the use of the University's branding, it was difficult to come up with visually interesting graphics that would tie the website directly to Himmelfarb Health Sciences Library (Thompson, 2013, p. 30).

One of the final challenges was to find a suitable name for the service. A succinct name that communicated the health sciences focus of the service. **. . .** The name also

had to be distinctive from the one being used by the main campus library for its *Summon*

application. Currently, it is called "Health Information @ Himmelfarb," and the text "Start

searching Health Information @ Himmelfarb" appears under the search box" (Thompson,

2013, pp. 35 36).   "The version of *EDS* that was rolled out in June 2012 to Himmelfarb's users

is quite different from the 'out of the box' implementation the library started with in summer

2011" (Thompson, 2013, p. 37). "In designing the default presentation for the *EDS* search box,

Himmelfarb desired to keep it as simple as search boxes users encountered on other search sites"

(Thompson, 2013, p. 30).

The two quotes in the preceding paragraph look toward the second, and probably most

important, of the three principal reasons to customize a Web-scale Discovery Tool: to meet

stakeholder needs. Himmelfarb addressed this problem by meeting its stakeholders at their

comfort zones, making its WSD interface resemble other sites its primary clientele of health

sciences researchers, faculty, and students already were familiar with. Libraries serving a more

diverse mixture of faculty, graduate students and undergrads will customize their WSDTs

differently. Community colleges may tailor theirs differently still.

The first two considerations, branding and meeting stakeholder needs, can be viewed as

merely means to an end: the third consideration of getting the WSDT used. A web-scale

discovery tool represents a large investment of both funds and the time and labor of preparing the

system for launch, and its intense use both protects and justifies these investments.

Meeting stakeholder needs is essential if the WSDT is to succeed as an integral part of the

library's offerings; end-user comfort is paramount. The tool may search the library's catalog, but

it isn't the catalog. It may search databases, but itself isn't a database. With discovery tools, just

looking like a duck does not necessarily make it a duck. Most WSDTs incorporate not only the

library's catalog and databases belonging to the vendor of the discovery service, but also database content imported from other providers and possibly even some freely-accessible web resources. The compromises required to make this various-sourced content compatible and cross-searchable within the WSDT also inhibit the tool from behaving exactly like the catalog or native database or other online search tool with which users already may be familiar.

To minimize and counteract initial user confusion and bring users to a state where familiarity breeds content, libraries should seek to establish a context and defined scope for their WSDT. These efforts may be achieved through a combination of panes, facets, buttons, checkboxes, links, and tabs. These can be as simple as South Alabama's "What am I searching?" link (Fig. 3) to the more elaborate LibGuides created by Birmingham-Southern College (see Fig. 5) or The University of Auburn at Montgomery (see Fig. 6).
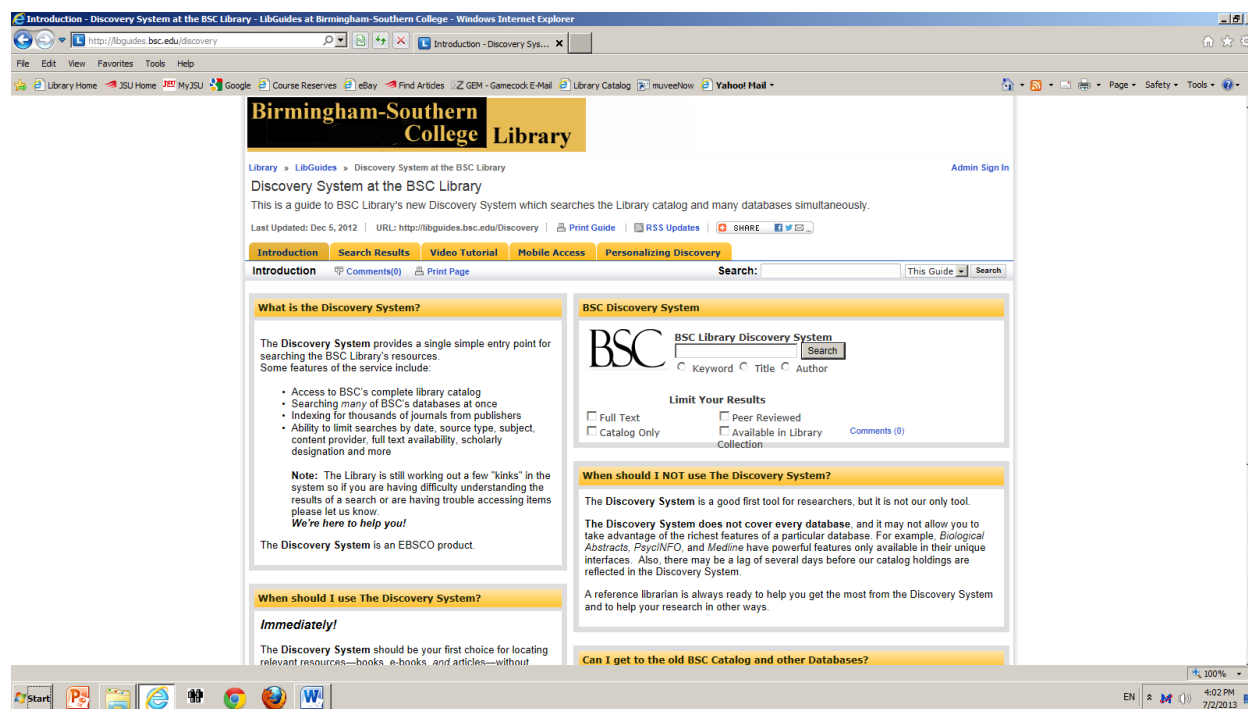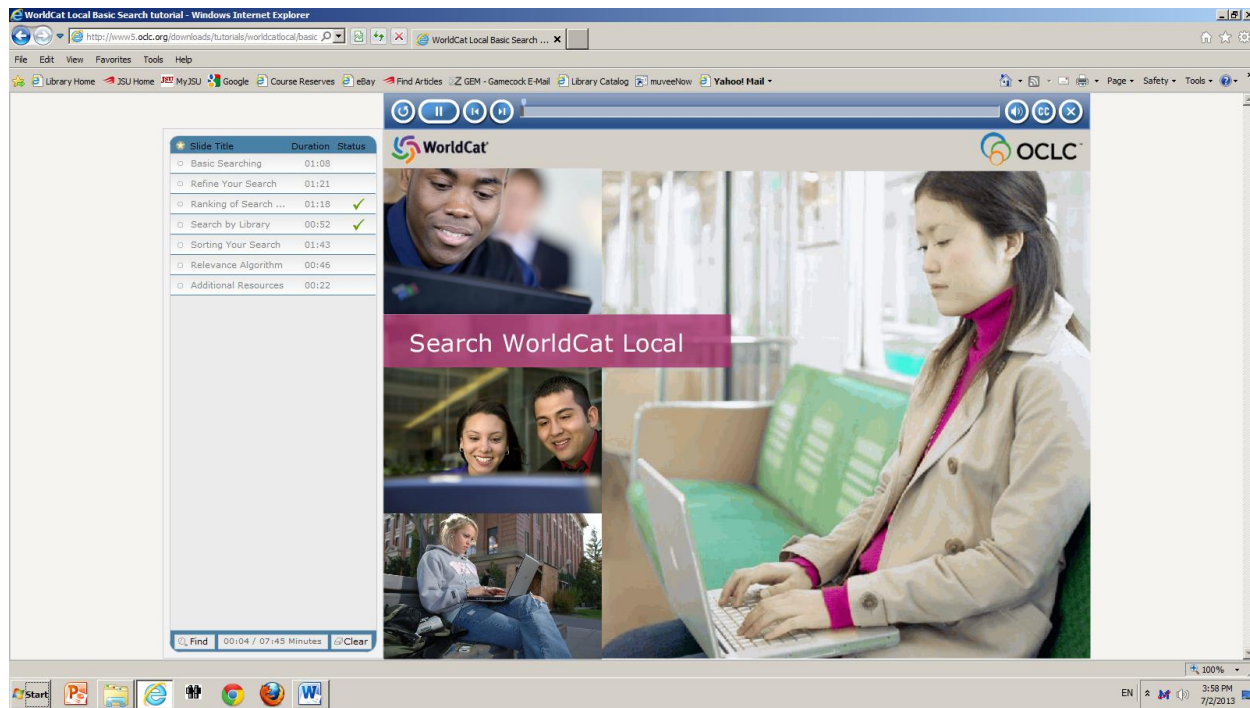

(Figure 5: Birmingham-Southern College, "Discovery System at the BSC Library," 2013)
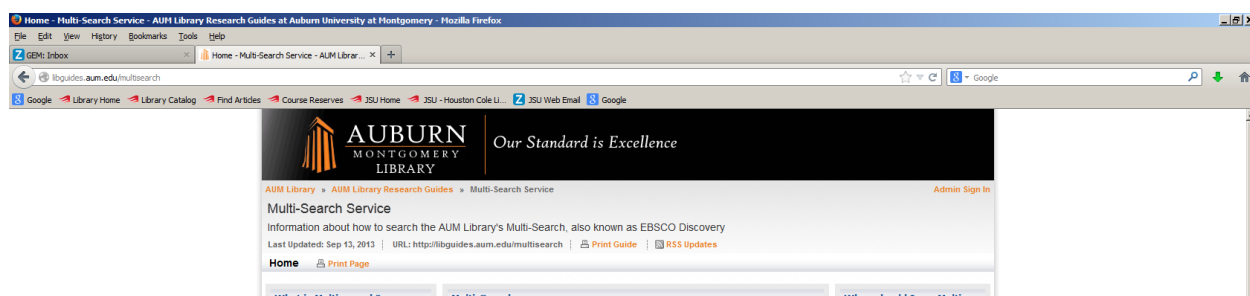
(Figure 6: Auburn University-Montgomery, "Multi-Search Service," 2013)

The University of Montevallo goes still further by providing an instructional video (see Fig.

7).

(Figure 7: University of Montevallo, WSD instructional video, 2013)

WSDTs do not search quite as simply as online public access catalogs or native databases, and whatever intuitive search skills library stakeholders have gleaned from using these latter do not always completely carry over to searching in web-scale discovery. To expect them to and therefore to leave stakeholders with no WSDT guides or searching aids is akin to putting them into a canoe with no paddles, a condition unlikely to lead to user satisfaction, which in turn is not likely to generate heavy use of the WSDT.

The Table, especially the fourth and fifth columns, reveals some identifiable trends. One is that, while many of the surveyed libraries made changes to the customizations of their WSDTs, a few were static and largely stood pat after the initial launch. With the libraries that took a more dynamic approach, some changes were largely cosmetic while others were more substantive. A few of the surveyed libraries either changed the name of their WSDTs or eliminated the name as part of an interface update. These changes and updates can be for any number of reasons -- not always within the libraries' control -- such as changing vendors, having to restructure to make the interface more compatible with mobile digital devices, or just wanting to give the impression of keeping up-to-date by offering a fresh look. Things get larger, things get smaller, things get moved. Things disappear. But these changes pertain more to the cosmetic level or to branding: important for drawing users' attention to the WSDT and making a favorable first impression in order to encourage them to use the tool. In addition to renaming their WSDT, some of the surveyed libraries moved a bit of information from the Homepage to a page one mouse click in.

(Figure 9: Birmingham-Southern College Library, February 2016)

Relocating or removing information is a more substantive change revealed by the Table. For some of the surveyed libraries this appears to be an ongoing process: changes were made between June 2013 and June 2015, and again between June 2015 and February 2016. Moving information one mouse click in from the Homepage where it initially appeared is minor, but instances where the information is buried several mouse clicks in or deleted entirely are much more impactful, since the type of material migrated usually falls under the rubric of user aids that can affect the efficiency and effectiveness of WSD and promote user comfort with and continued use of the tool. Snippet notes regarding the tool's scope can spare users the frustration of searching for things not loaded into the WSDT's index, while context features such as faceted panes, checkboxes, radio buttons, tabs, and hyperlinks can aid navigation and encourage pre-search sculpting beyond what the single search box, Google-like one-click approach allows.

"Discovery tools, which support more tasks, must make compromises in usability that simpler systems can avoid" (Fagan, 2012, p. 103). In doing so, they cast a mantle of the familiar over the unfamiliar. Like online catalogs, WSDTs include books among their records indexed, but they cannot be searched exactly like a catalog. They also index records from databases; but even if the search interface looks familiar (EBSCO's Discovery Service, for example, populates its left pane with largely the same facets displayed in its native databases), WSDT's are not best searched exactly the same way as native databases. Often, mostly to reduce the initial Search Results list to a manageable number and achieve greater results relevancy, WSD searches must be refined by employing quotation marks around search terms or changing field labels. Native databases, because they are populated so sparsely when compared to Discovery tools, rarely require these manipulations.

User aids and guides are intended to spare WSDT users missteps like these. They can identify what the tool searches and does not search (i.e., what sort of records populate its index) and, more importantly, illuminate how the WSDT should be searched: what strategies produce the most satisfying search experience and yield the most suitable results. They counter the effects of "Google-ization" -- results lists that are too long with pertinent results buried too deep, and the search fatigue repeated experiences of this type bring about (Strykowski, 2015). Scope notes, panes, facets, etc. can forestall search fatigue, and user aids -- video-tutorials, search strategy walk-through guides -- can instruct WSDT users how to use the tool both effectively and efficiently in a way that will shorten their results lists while surfacing the most relevant results to the top.

Migrating this user-guide information from its initial location on the landing screen, particularly if it moves more than one mouse click away and there are no clear directions to the

new location, can create problems for the WSDT user, who most times is going to be a student whose experience, if s/he has any prior experience at all, is going to be with native databases accessible through the Alabama Virtual Library or some similar state-funded database package. The nuances and complexities of a Discovery tool demand more preparation than this. Difficulties in surfacing the WSDT user aids will only exacerbate this problem.

For the authors of this article, tracking this this user-guide content once it had been migrated from the Homepage presented a challenge. In a few cases it simply "got disappeared"; but the best of it was relocated, usually into a standalone LibGuide or embedded in a LibGuide with a broader scope than just the web-scale discovery tool.
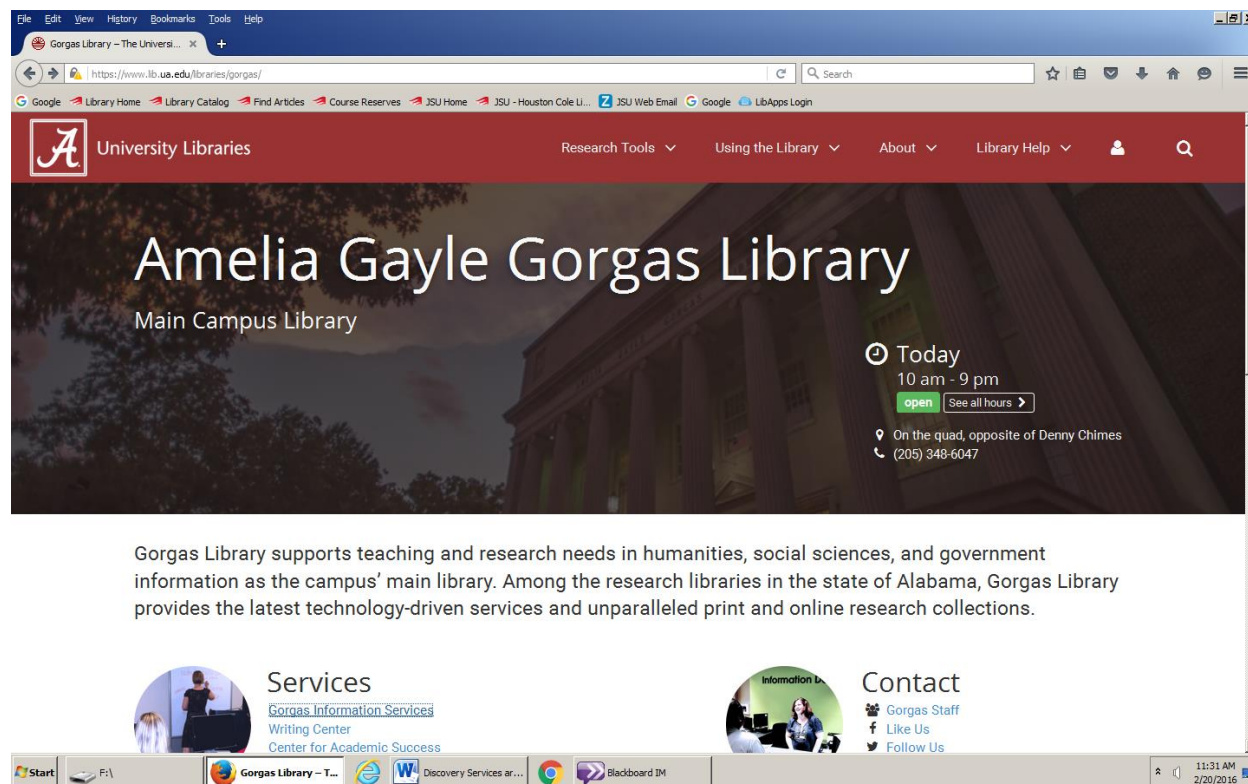
(Figure 10: University of Alabama landing screen, February 2016)
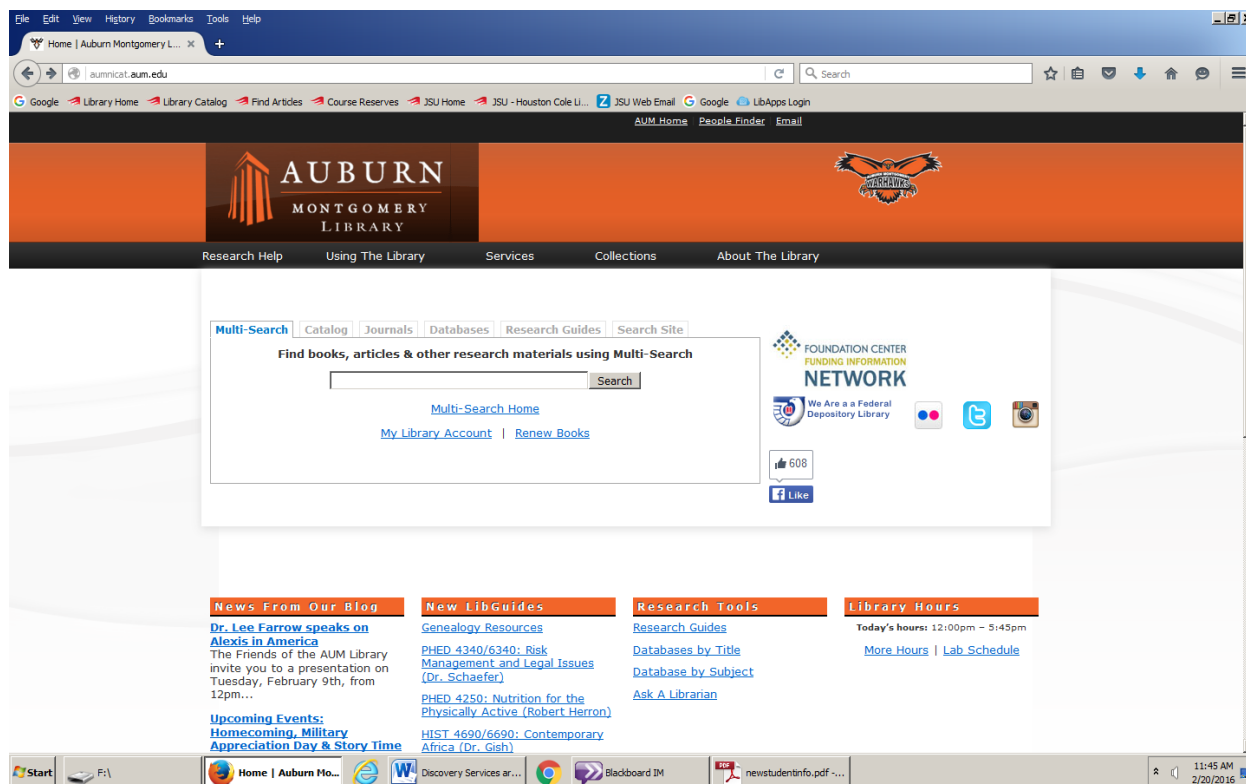
(Figure 11: Auburn University-Montgomery, February 2016)

LibGuides would be an appropriate and perhaps the best platform for such information. Through their appearance they could conform to the branding of the library or the institution and, more importantly, their expansible format allows the space required to present in detail the strategies and skills needed to master a WSDT. The three goals of unity, coherence, and completeness repeatedly stressed by teachers of English composition are easily achievable in a Discovery-centric LibGuide. Everything the hosting library thinks students should know about its WSDT could be included in the LibGuide and presented in a logical, coherent order.

But this perfect LibGuide is of no use to students if they cannot find it, and to find it they first need to know that it is there -- that it exists for their use. In tracking the migrated user-guide content, the authors of this article discovered much of it several mouse clicks away from the WSDT landing page on which it initially was encountered in 2013. A multi-stage clickpath in itself is no great obstacle; a dearth of pointers or guideposts along the way can make it so.

Librarians who are familiar with a discovery tool they may have had for years know how to get where they're going, and they will know if content gets migrated or the WSDT interface changes. Others who are not already acquainted with the service, whether students new to the institution or librarians from outside it, may have rougher going, even if they know from previous visits to the site that the content *was* there. It's an important consideration for WSDT stakeholders and for the success of the WSDT itself.

The problem has a simple solution that does not mandate any alterations to the clickpath of the migrated content or the content's location, and is one that many of the surveyed libraries employed in their initial WSD launch: the provision of live links directly to the user-guides and other information for the tool. How hard would it be, in the landing screen pane containing the WSDT searchbox, to create a hyperlink with the slogan "Discovery Tool User Aids" or "Guide for _____"? Regardless of the number of clicks in the path, this live link would take users directly to their destination and would take up so little space that even the most crowded page should have room for it. It's been done before, and providing a simple way to access these guides could pre-empt and solve a lot of problems users might have with discovery tools.

Conclusion

In their infancy Discovery tools offered themselves as "Google-style search tools which provide one-box searching for all library content with a centralized consolidated index" (Aharony, 2015, p. 429). They were marketed as a direct competitor, an academic alternative, to Google. In comparing the advantages and disadvantages of WSDTs, Ahrony and Prebor further note that "participants mentioned that the discovery tool offers a single comprehensive search, saves time, filters results, and suggests advanced search possibilities. In addition, discovery tools' interface is friendly ("Google style"), [but] these tools also produced "information

overload, a lot of noise, lack of precision and relevance, lack of browsing, . . . and redundant results" (Aharony, 2015, p. 432). Truly a tale of two search engines: Discovery is the best of Google; Discovery is the worst of Google. These aspects of the discovery experience must be addressed by every library that subscribes to these tools, and a part of this process is customization.

Through surveying the Alabama senior institution library websites, this study examined WSD customization practices in these libraries. The results reveal that all surveyed libraries offer customization at some level, whether providing in-depth customization with extensive information -- including search strategy demos in video format -- or simply providing only a single sentence to explain what WSD is. Some libraries gave WSD a new name so that it could easily be identified by the users, while others guided users through questions such as "When should I use WSD" or "When should I NOT use WSD?" in recognition of the fact that not all the library's subscribed databases or other resources are included in its WSD and therefore some search results could be incomplete.

Tracking the WSDTs in the surveyed libraries over time also revealed that, with a few exceptions, the customizations did not remain static but underwent changes of varying degree, from small cosmetic changes such as the name to larger, more substantive changes involving content such as scope notes and user aids.

Commercial products from vendors have the potential to change research strategies and habits. As a still-evolving product, WSDTs are an example of this, providing users another option for doing research. Though vendors continue to improve WSD products (such as Serials Solution Summon 2.0, which is claimed as Discovery reinvented), understanding users' search behavior and customizing WSD accordingly is vital. Customization not only promotes a better

understanding of the product; it also offers users a better way to do research. Study of feedback

about the product from the users is an area ripe for further research. So might also be the effect

on users of changes in the location and accessibility of WSD user aids.

Appendix: Alabama College Directory

http://www.ache.alabama.gov/Colleges&Universities/pvtsr.htm

http://www.ache.alabama.gov/Colleges&Universities/4YrPubIndex.htm

http://www.ache.alabama.gov/Colleges&Universities/srpubdir.htm

http://library.bsc.edu/

http://libguides.huntingdon.edu/website

http://library.samford.edu/

http://libguides.shc.edu/burkelibrary

http://alasu.worldcat.org/

http://www.athens.edu/library/

http://aumnicat.aum.edu/

http://www.jsu.edu/library/

http://trojan.troy.edu/library/

http://www.lib.ua.edu/libraries/gorgas

http://www.mhsl.uab.edu/

http://www.uah.edu/library

http://libguides.montevallo.edu/index

http://www.una.edu/library/

http://library.southalabama.edu/

http://library.uwa.edu/

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