

October 2009

Federated Search Falls Short

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Recommended Citation

Knight-Davis, Stacey; Johnson, Sarah L.; and Whisler, Karen, "Federated Search Falls Short" (2009). *Faculty Research & Creative Activity*. 14.

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Federated Search Falls Short

Stacey Knight-Davis

Karen Whisler

Sarah Johnson



Booth Library, Eastern Illinois University

- 12,000 total students
- 10,600 FTE
- Master's Comprehensive
- Centralized Library



Federated Searching

- Offers one interface to search multiple databases simultaneously.
- Acts as a portal only—no indexing
- Basic search commands sent through a *connector* to multiple databases
- Z39.50, Search/Retrieve via web



WebFeat Implementation

- Provided by CARLI
- Launched October 2005
- Search box embedded in existing pages

General Article Indexes

**Booth
Library**



[How do I... ?](#)

[Ask a Librarian](#)

[Hours](#)

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[Books](#)

[Journals](#)

[Newspapers](#)

Magazines and Journal Articles

[General Article Indexes](#)

[Resources By Subject](#)

[Vendor](#)

[Booth Library Periodicals List](#) - an alphabetical list of periodicals available to Booth Library. Each entry includes call number and holdings information.

Databases - All Subjects

[19th Century UK Periodicals Digital Archive: New Readerships Collection](#) Off campus PROXY

The New Readerships: Women's, Children's Humor and Leisure/Sport Collection offers access to a wide variety of British life in the 19th century, including women's issues, social issues, and Victorian life and culture.

[Abstracts in Social Gerontology](#) Off campus PROXY

Covers essential areas related to social gerontology, including the psychology of aging, elder abuse, society and the areas of relevance to the discipline. The index contains 70,000 records, which are carefully selected from the most current literature in the discipline (1990-to present)

[ACS Publications](#) Off campus PROXY

Select a database to search

Select a database to search

[View descriptions of these databases](#)

- [InfoTrac Expanded Academic Index ASAP](#)
- [EBSCO Academic Search Premier](#)
- [Lexis-Nexis](#)
- [JSTOR](#)
- [Article 1st](#)
- [Wilson Select Plus](#)

Search all the above databases

[Issues and Controversies On File](#)

...ossible to Booth Libra
database name and c



General Article Indexes

Search all the below databases. (Except marked by **x**)

Search

[Customize](#)

[Search](#)

[InfoTrac Expanded Academic Index ASAP](#) Off campus PROXY **F**

Abstracts and many complete articles from scholarly and general-interest journals in the social sciences, humanities and nontechnical sciences. (1980 to present)

[EBSCO Academic Search Premier](#) Off campus PROXY **F**

Indexes over 8,000 periodicals, providing full text for over 4,500 titles covering the social sciences, humanities, general science, multi-cultural studies, education, and much more.

[Lexis-Nexis](#) Off campus PROXY **F**

Fulltext access to a wide range of newspapers, business, legal, medical and political information, both foreign and domestic. Includes New York Times. (1980 to present)

[JSTOR](#) Off campus PROXY **F**

Digital archive of over 650 core academic journals. A complete archive of titles digitized starting with the very first issue of the journal. [Browse Titles](#)

[Article1st](#) Off campus PROXY **F**

Citations and many complete articles from 12,000 journals in all subjects. (Generally, 1990 to present)

[WilsonSelectPlus](#) Off campus PROXY **F**

Citations, abstracts and complete articles from almost 1400 periodicals covering subjects in the general sciences, humanities, current events and business (Generally, 1994 to present, updated weekly).

[Issues and Controversies On File](#) Off campus PROXY **F x**

This database combines analysis and explanations of opposing points of view for current and historical events. It includes chronologies, illustrations, maps, tables, sidebars, bibliographies and contact information.



ALL SUBJECTS

- Arts/Music
- Astronomy
- Biological Sciences
- Business
- Chemistry
- Comm. Disorders
- Communication Studies
- Economics
- Education
- Ethnic/Gender Studies
- Geography
- Geology
- Health/Medicine
- History
- Journalism
- Library Science
- Literature/Drama
- Math/Computer Science
- Nursing

Literature/Drama

DATABASES JOURNALS RESEARCH GUIDES WEB RESOURCES

Subject Specific Databases

[Columbia Granger's World of Poetry](#) Off CAMPUS PROXY **F** **X**

There are over 181,000 fulltext poems with biographies, commentaries, critical context, and a glossary in this database.

[Humanities International Complete](#) Off CAMPUS PROXY

A collection of references to literary, scholarly and creative journals in the humanities, published worldwide. This database covers over 1,900 journals dating as far back as 1925, including full text for more than 770 journals.

[JSTOR](#) Off CAMPUS PROXY **F**

Digital archive of over 1,000 core academic journals. A complete archive of titles digitized starting with the very first issue of the journal. [Browse Titles](#)

[MLA International Bibliography \(EBSCO\)](#) Off CAMPUS PROXY **F**

MLA International Bibliography is a bibliography of journal articles, books and dissertations. Produced by the Modern Language Association, the electronic version of the bibliography dates back to 1926 and contains over 1.7 million citations from more than 4,400 journals and books from over 1,000 publishers.

[Project Muse](#) Off CAMPUS PROXY **F**

Over 400 fulltext journal titles the fields of literature and criticism, history, the visual and performing arts, cultural studies, education, political science, gender studies, economics, and many others, generally 1995 to present.

Search all the above databases. (Except marked by **X**)

Search

[Customize Search](#)

Related and Interdisciplinary Databases

Booth Library



You searched: Keyword = "libraries"

[Back to Search](#)

Keyword

And

And

Full-text articles only

Publication date:

All dates Year range

From To

Search

Clear All

Complete!

Hits	Database	Description
0	LexisNexis® Academic - Quick News Search	
53379	ArticleFirst	
32592	Wilson Select Plus	Wilson Select Plus
0	LexisNexis® Academic - Law Reviews	Law Reviews is part of LexisNexis Academic
0	LexisNexis® Academic - News Search	LexisNexis® Academic - News Search
199042	JSTOR	
518622	Academic Search Premier	
29935	Infotrac Expanded Academic ASAP	

Results display mode:



Evaluation

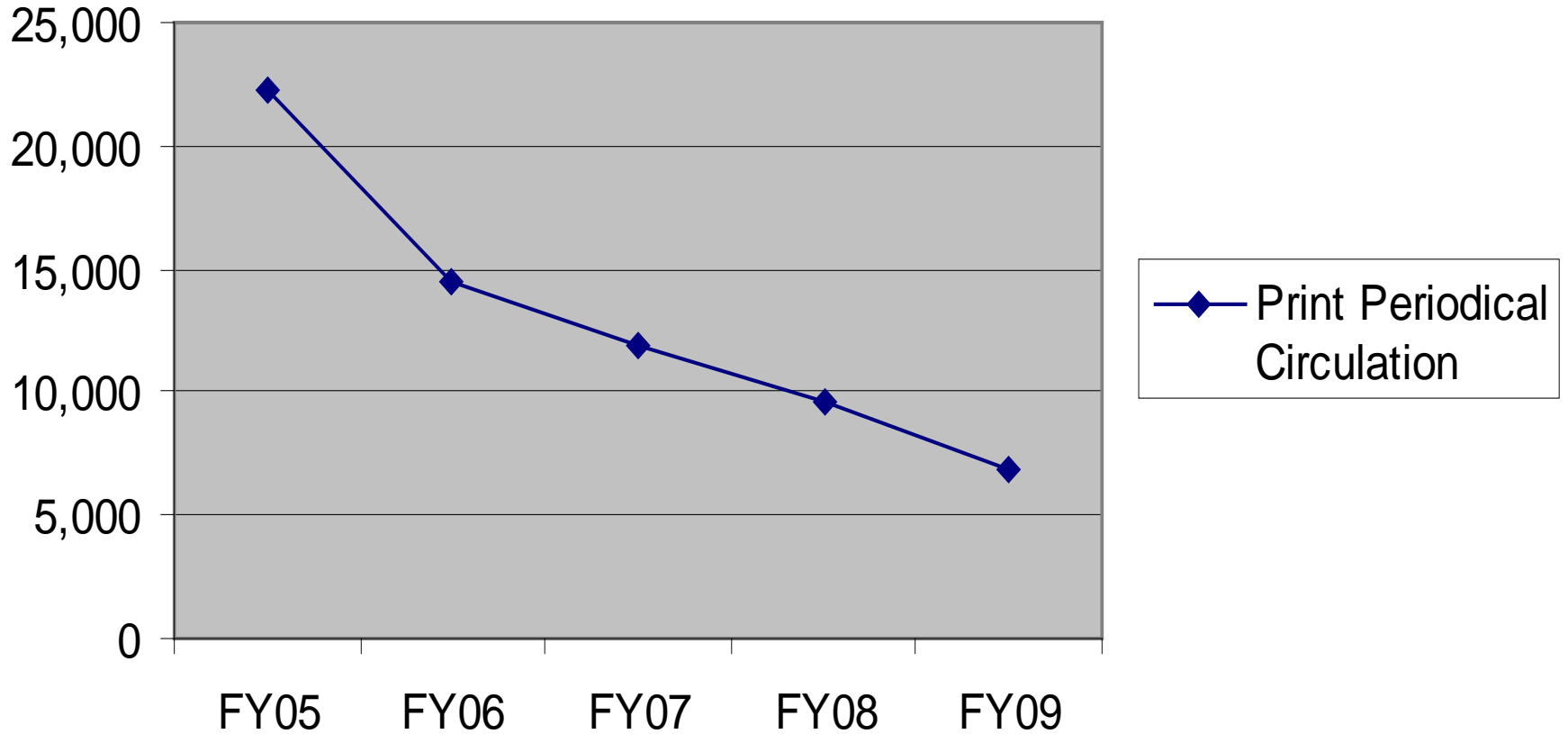
- Review the literature

- Federated Search: Solution or Setback for Online Library Services* from Haworth Press (0789036606)

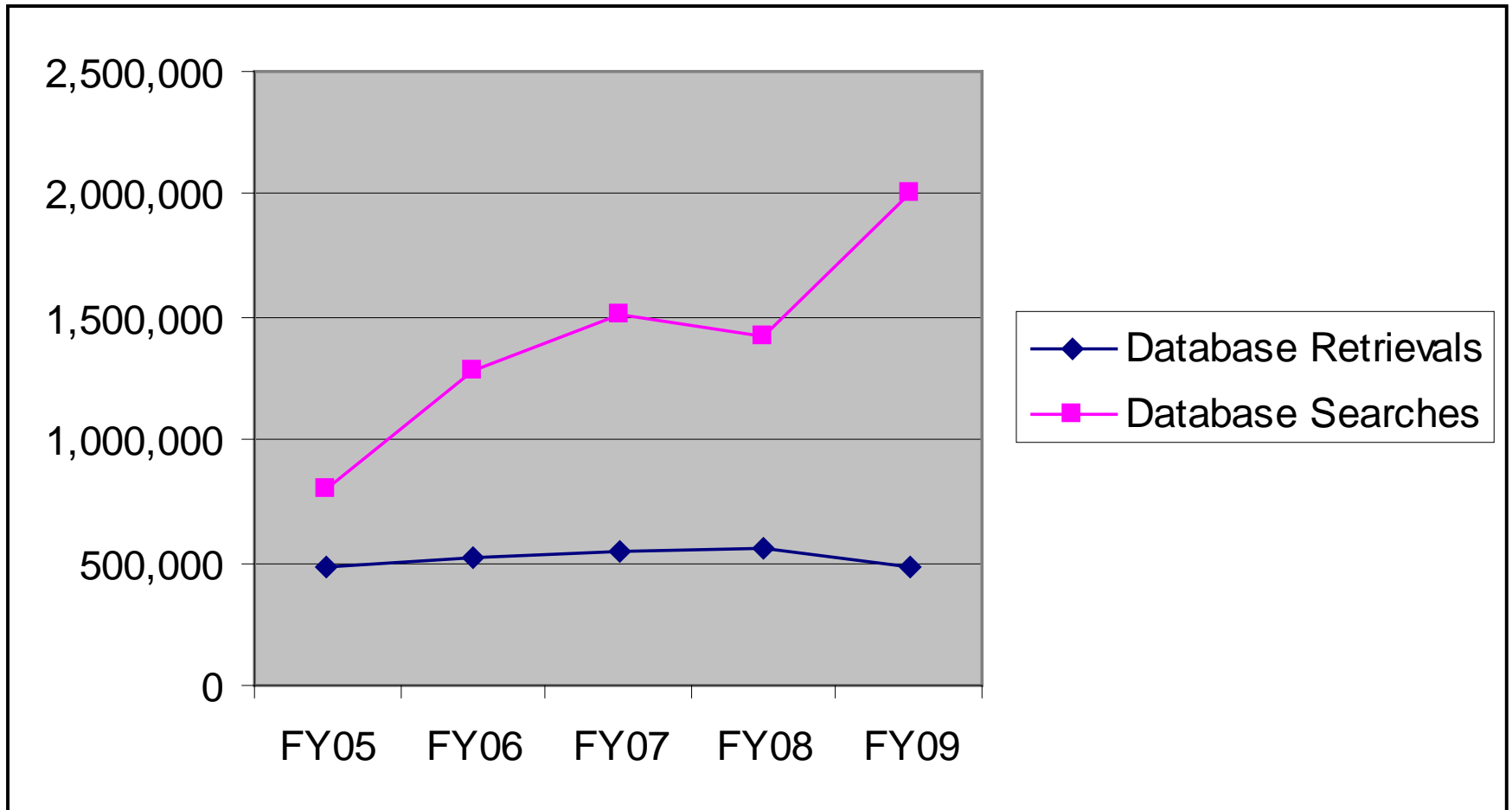
- Check the numbers

- Periodical Circulation
- Database Use Statistics
- Patron Satisfaction Survey

Print Periodical Circulation



Database use statistics FY05-FY09



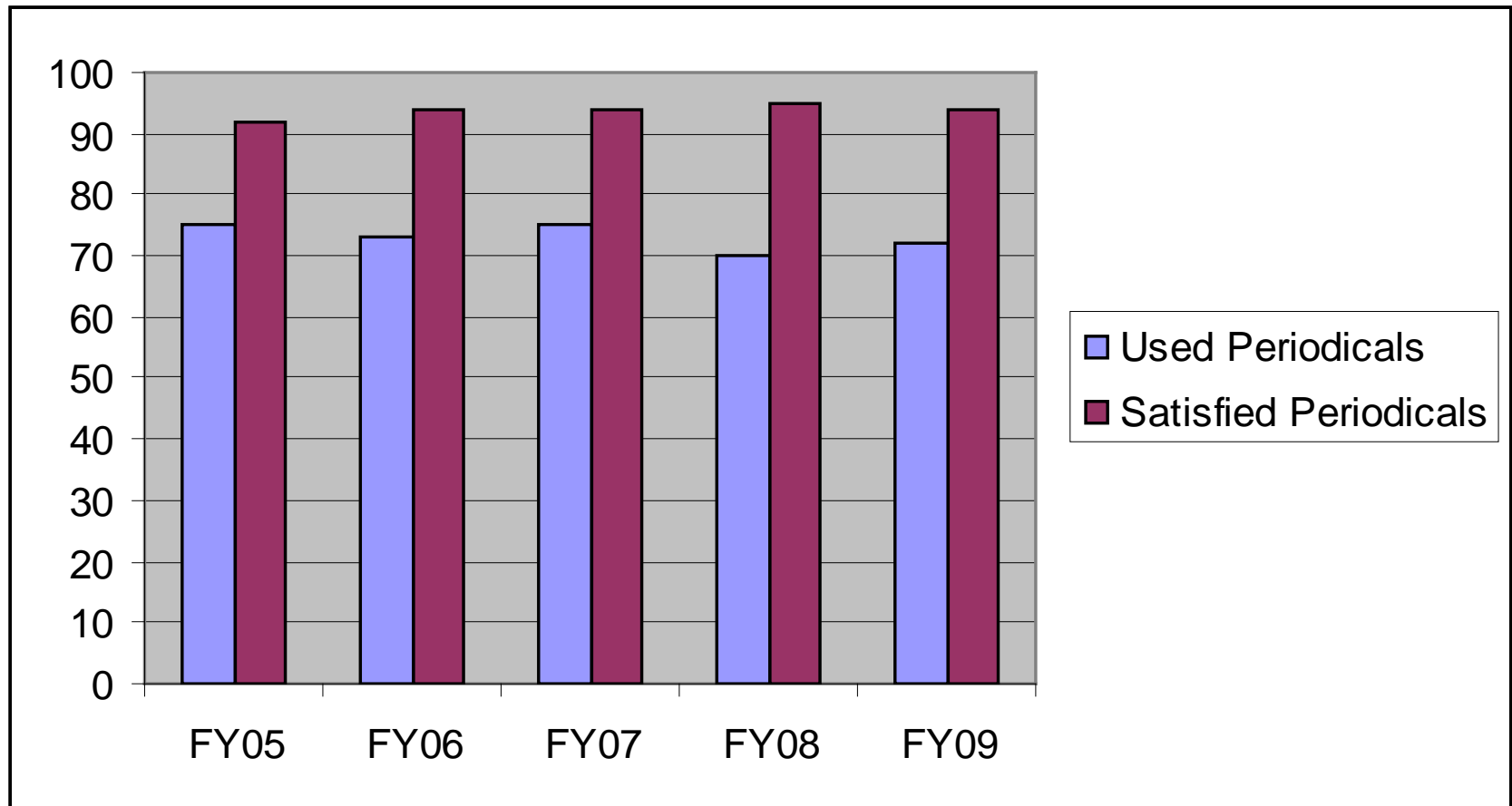
Annual patron satisfaction survey

■ Paired questions:

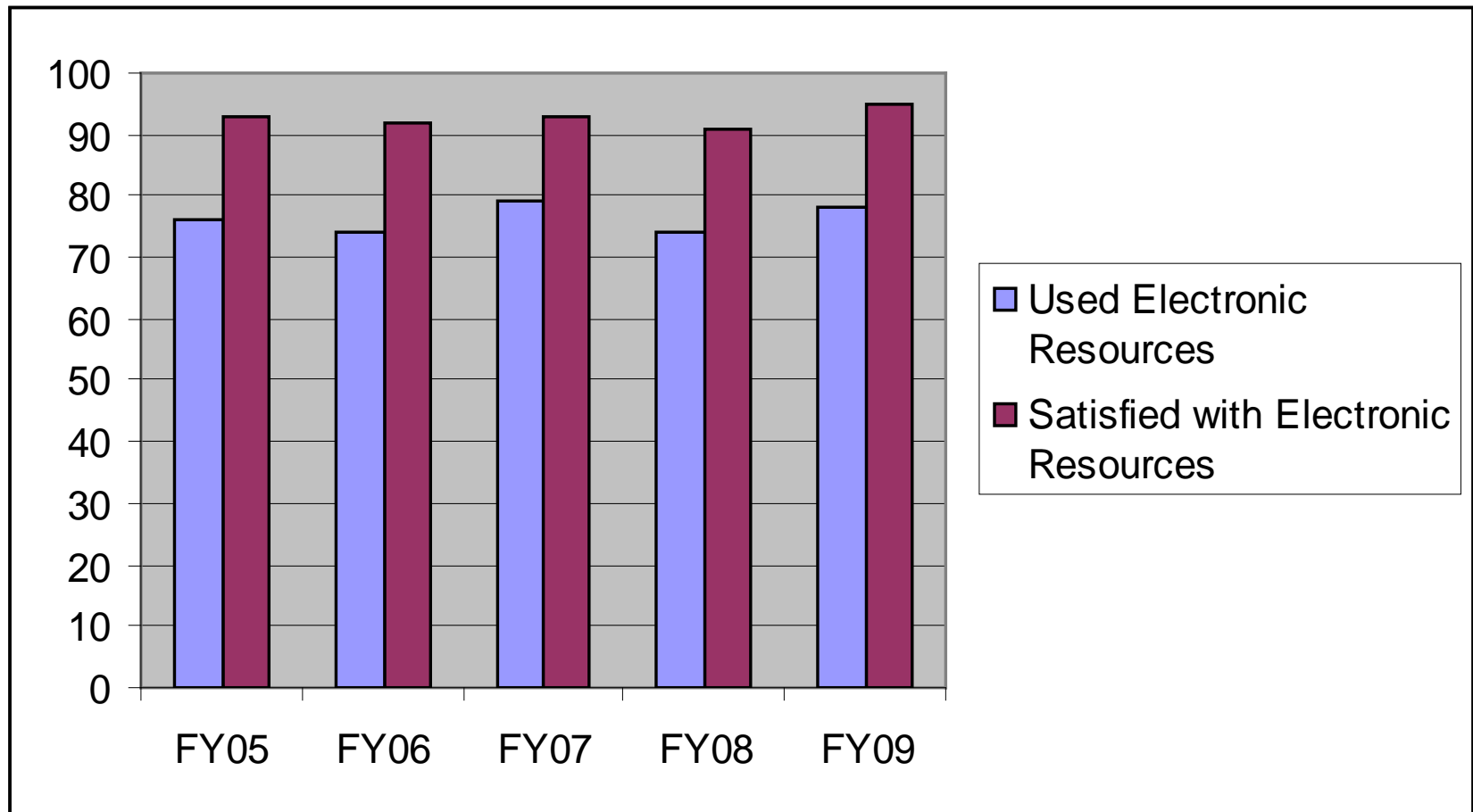
- I have used the library's periodicals collection.
- I am satisfied with the library's periodicals collection.

- I have used the library's electronic resources.
- I am satisfied with the library's electronic resources.

Periodical usage and satisfaction – % of patrons



Electronic resource usage and satisfaction – % of patrons





WebFeat Statistics Module

- Collects searches per database
- Collects “full record” views

SMART Report Console - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://wfx.webfeat.org/wfsmart/gotoConsole.do?acid=WxblLlAsFwkh5hBD6Uv8wK1b6VIAXGvK

SMART Report Console

Choose the desired options and click 'Generate'

Select Report Type

Searches Database Activity Database Metrics

Downstream Activity

Select Report Granularity

Hourly Daily Weekly

Select Report Criteria

From: 9/21/2009 To: []

Client: CARLI: Eastern Illinois University

User Type set: Current Historical

User Types:

- EIU
- Remote
- WebFeat - Test
- WF - Hemanta
- wf hope
- ~unclassified~

Data Aggregation: None Hour of Day Day of Year Week of Year

User ID Type: IP Address User Type

Database set: Current Historical

Downstream Type: Author

Select Output Options

Items per Page: 10

Display top: All items, using Full Record

Display: Chart Table

Output Type: HTML XLS

[FAQ](#) | [Email support](#) | ©2007 WebFeat, Inc.

Database Activity - Mozilla Firefox

http://wfx.webfeat.org/wfsmart/gotoProduceReport.do

WebFeat Express

WebFeat SMART Report

Database Activity Current Client: CARLI: Eastern Illinois University [Need help?](#)

Query Criteria

Query Results

Database	Searches	Full Record	Next Set	Total
Academic Search? Premier	24	0	0	24
AGRICOLA	3	0	0	3
America: History and Life	1	0	0	1
AP Images	48	0	12	60
Art Abstracts	1	0	0	1
Biological & Agricultural Index	3	0	0	3
BIOSIS Previews	3	0	0	3
Chicago Tribune	40	0	12	52
Chicago Tribune Historical Archive	7	0	0	7
CINAHL Plus with Full Text	2	0	0	2
Page Total	132	0	24	156
Report Total	454	4	68	526

Page 1 of 4 | Close child windows too

[FAQ](#) | [Email support](#) | ©2007 WebFeat, Inc.

Done

zotero



Analysis, Fall 2008

- Significantly more full record views in native databases
- Significantly more searches in native databases than WebFeat

WebFeat vs. Native Databases

	Database	Searches	Full Record or Full Text	Full Record/ Searches	Native minus WebFeat searches	Native %- WebFeat %
Webfeat	Academic Search™ Premier	2358	375	15.9%		
Native		47420	24714	52.1%	54.0%	38.1%
Webfeat	JSTOR	2733	506	18.5%		
Native		15492	4083	26.4%	28.0%	9.5%
Webfeat	Expanded Academic ASAP	2171	109	5.0%		
Native		7845	4553	58.0%	78.3%	73.3%

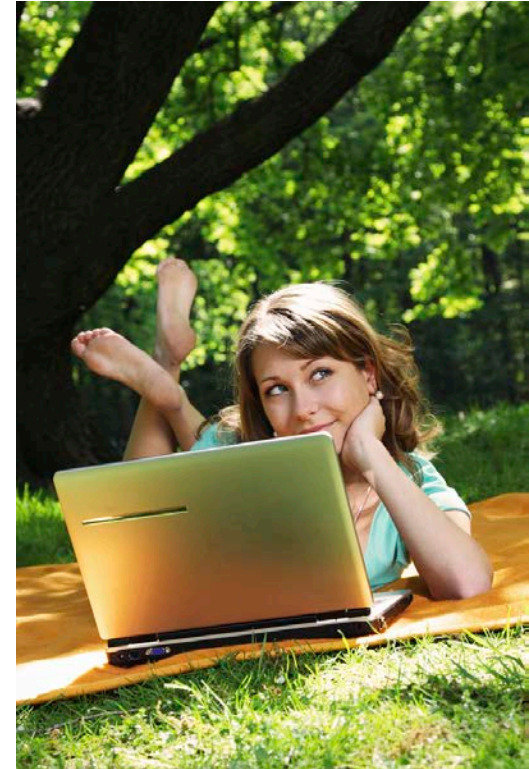


Things to consider...

- Differing expectations
- Database-dependent search techniques
- Staffing issues
- Statistics tracking
- Pre-testing of potential purchases

Expectations vs. Reality

Librarians:
resource discovery



Students/Patrons:
finding full text, fast

Booth Library

[How do I...?](#)[Ask a Librarian](#)[Hours](#)[Maps](#)[My Account](#)

You searched: Keyword = "ida wells"

[Back to Search](#)

	Keyword	ida wells
And	Keyword	
And	Keyword	

Publication date:

 All dates Year range

From 1900 To 2009

 Full-text articles only[Search](#)[Clear All](#)

Complete!

Hits	Database	Description
------	----------	-------------

37	African American Newspapers	
5438	JSTOR	
77	Infotrac Expanded Academic ASAP	
19	Chicago Tribune Historical Archive	
7	American Periodical Series Online (1791-1	
38	MLA International Bibliography	
6	The New York Times (1851 - 2003)	
11	Academic Search Premier	
2	Humanities International Complete	
20	Social Science Abstracts	
87	America: History and Life	
273	I-Share	

[Print Results](#)[Email Results](#)[Save Results](#)

Issue: 1
Pages: 137(10)
Description: 4138 words ; Book Review

[View](#) [10 PDF Pages](#)

20. **Ida B. Wells-Barnett and American Reform, 1880-1930.(Book Review)**

Author: Patti Capel Swartz
Journal: Legacy: A Journal of American Women Writers
Pub.: 2003-06
Volume: 20
Issue: 1-2
Pages: 207(3)
Description: 1227 words ; Book Review

[View](#) [3 PDF Pages](#)

[Next Set...](#)

Chicago Tribune Historical Archive

Results 1 to 10 of 19

Select or Deselect all

- Add 16 Acres to Ida Wells Home Plan**
Author: THOMAS BUCK
Journal: Chicago Daily Tribune (Chicago, Ill.)
Pub.: 1950-10-01
Pages: S1 (2 pages)
[View](#)
- Ida Wells Woman's Club Will Hear Author Today**
Journal: Chicago Daily Tribune (Chicago, Ill.)
Pub.: 1950-02-09
Pages: S_A2 (1 pages)
[View](#)
- FAMILIES MOVE INTO IDA WELLS PROJECT TODAY**
Journal: Chicago Daily Tribune (Chicago, Ill.)

Database-dependent search techniques

relevancy

dates

sorting

Full Text

View

duplication

author / title / subject

keywords

timeouts

How databases interpret keyword search for “bird flu” in WebFeat

Home EIU Online Catalog Books Magazines

Booth Library

How do I...? Ask a Librarian Hours Maps My Account

You searched: Keyword = "bird flu"

[Back to Search](#)

Keyword

And
And

Publication date:
 All dates Year range
From To

Full-text articles only

Search

Clear All

Complete!

Hits	Database	Description
516	ArticleFirst	
1202	JSTOR	
146	LexisNexis® Academic - Law Reviews	Law Reviews is part of LexisNexis Academic
0	LexisNexis® Academic - News Search	LexisNexis® Academic - News Search
418	Infotrac Expanded Academic ASAP	
1839	LexisNexis® Academic - Quick News Search	
5638	Academic Search Premier	
146	Wilson Select Plus	Wilson Select Plus
11	Online Catalog	Online Catalog
50	iShare	

[Print Results](#) [Email Results](#) [Save Results](#)

How databases interpret keyword search for “bird flu” in WebFeat

Hits	Database	Description
516	ArticleFirst	
1202	JSTOR	
146	LexisNexis® Academic - Law Reviews	Law Reviews is part of LexisNexis Academic
0	LexisNexis® Academic - News Search	LexisNexis® Academic - News Search
418	Infotrac Expanded Academic ASAP	
1839	LexisNexis® Academic - Quick News Search	
5638	Academic Search Premier	
146	Wilson Select Plus	Wilson Select Plus
11	Online Catalog	Online Catalog
50	I-Share	

 Print Results  Email Results  Save Results

ArticleFirst = Boolean AND

JSTOR = Boolean OR

LexisNexis = Boolean AND, or phrase (could not duplicate)

InfoTrac = Boolean AND (academic journals category)

Academic Search Premier = Boolean AND + synonyms

Voyager Online Catalog and I-Share = Boolean AND

How databases interpret full-text searches in WebFeat

You searched: Keyword = "scarlet letter" [Back to Search](#)

Keyword

And

And

Full-text articles only

Publication date:
 All dates Year range
From To

Complete!

Hits	Database	Description
0	MLA International Bibliography	
734	Project Muse	
75	Humanities International Complete	
10649	JSTOR	
81	Online Catalog	Online Catalog
513	I-Share	

Compare to the native interfaces...

Thesaurus | **MLA Directory of Periodicals** | Names as Subjects | More ▾

Sign In to My EBSCOhost | Folder | New Features! | Ask a Librarian | Help

Searching: **MLA International Bibliography** | Choose Databases »

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scarlet letter in Select a Field (optional) Search Clear ?

and ▾ in Select a Field (optional) ▾


and ▾ in Select a Field (optional) ▾ Add Row

Basic Search | Advanced Search | Visual Search | Search History/Alerts | Preferences »

Results: 1-10 of 12 Page: 1 [Next](#) Sort by: Date Descending Add (1-10)

Results for: scarlet letter ✓ Options set Alert / Save / Share »

• Search Mode: Boolean/Phrase

1. [Branding the Body American: Violence and Self-Fashioning from The *Scarlet Letter* to American Psycho](#) 
By: Söderlind, Sylvia; Canadian Review of American Studies/Revue Canadienne d'Etudes Américaines, 2008; 38 (1): 63-81. (journal article)
Database: MLA International Bibliography
[Add to folder](#)
[PDF Full Text](#)
2. ['The Puritans of Today': The Anti-Whig Argument of The *Scarlet Letter*](#) 
By: Ryan, Michael; Canadian Review of American Studies/Revue Canadienne d'Etudes Américaines, 2008; 38 (2): 201-225. (journal article)
Database: MLA International Bibliography
[Add to folder](#)
[PDF Full Text](#)

Limit your results

Linked Full Text

Exclude Dissertations

Scholarly (Peer Reviewed) Journals

Filter by Publication Date:

1934 2008

2004 2008

[Update Results](#)

◀ Search Options ✓ Options set

Compare to the native interfaces...

The screenshot shows the JSTOR website interface. At the top left is the JSTOR logo with the tagline "Trusted archives for scholarship". A navigation bar contains links for SEARCH, BROWSE, ABOUT, PARTICIPATE, RESOURCES, and MyJSTOR. Below this is a banner asking users to help improve the JSTOR experience by participating in quick usability activities. The main search area includes a search bar with the text "scarlet letter", a "Search" button, and a "Modify Search" button. There are also checkboxes for "search within these results" and tabs for "Items", "Images in JSTOR", and "Images in ARTstor". The search results section shows "Results 1-25 of 10649 for << scarlet letter >>". It includes sorting options (currently set to "Relevance") and display options (currently set to "25 per page"). Navigation controls for "Page 1 of 426" are visible, along with a "Select/unselect all" checkbox and a "Save citation(s) (Requires login)" button. Two search results are listed:

1. **A Tale of Three Cities: The Banning of "Scarlet Street"**
[Matthew Bernstein](#)
Cinema Journal, Vol. 35, No. 1 (Autumn, 1995), pp. 27-52
[Item Information](#) | [Page of First Match](#) | [PDF](#) | [Export this Citation](#)
2. **The Control of Scarlet Fever**
[Gladys H. Dick](#)
The Science News-Letter, Vol. 14, No. 385 (Aug. 25, 1928), pp. 121-122
[Item Information](#) | [Page of First Match](#) | [PDF](#) | [Export this Citation](#)

Booth Library



You searched: Keyword = "ida wells"

[Back to Search](#)

	Keyword	ida wells
And	Keyword	
And	Keyword	

Publication date:

All dates Year range

From: 1900 To: 2009

Full-text articles only

Search

Clear All

Complete!

Hits	Database	Description
1	Humanities International Complete	
0	America: History and Life	
7	Academic Search Premier	
0	MLA International Bibliography	
37	African American Newspapers	
5431	JSTOR	
47	Infotrac Expanded Academic ASAP	
0	Social Science Abstracts	
0	Chicago Tribune Historical Archive	
7	American Periodical Series Online (1791-1	
0	The New York Times (1851 - 2003)	
81	Online Catalog	Online Catalog
281	I-Share	



Choose Databases

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To search within a single database, click the database name listed below. To select more than one database to search, check the boxes next to the databases and click *Continue*.

[Continue](#) Select / deselect all [The Music Index Online](#)

The Music Index Online, produced by Harmonie Park Press, is the single most comprehensive subject-author guide to music periodical literature. *The Music Index Online* has been available in print since 1949. In 2008, *The Music Index Online* coverage will span from 1973 to the present and contains surveyed data from over 850 music periodicals from over 40 countries. This database duly cites book reviews, obituaries, news periodicals, and news and articles about music, musicians, and the music industry.

[More Information](#) [Academic Search Premier](#)

This multi-disciplinary database provides full text for more than 4,650 journals, including full text for more than 3,900 peer-reviewed titles. PDF backfiles to 1975 or further are available for well over one hundred journals, and searchable cited references are provided for more than 1,000 titles.

[Title List](#) [More Information](#) [Humanities International Complete](#)

Humanities International Complete provides full text of hundreds of journals, books and other published sources from around the world. Produced by Whitston Publishing (an imprint of EBSCO Publishing), this database includes all data from *Humanities International Index* (more than 2,100 journals and 2.47 million records) plus unique full text content, much of which is not found in other databases. The database includes full text for more than 890 journals.

[Title List](#) [More Information](#) [RILM Abstracts of Music Literature](#)

RILM is a comprehensive music bibliography featuring citations, abstracts, and indexes. There are currently over 540,000 records in RILM on traditional music, popular music, and classical music, representing disciplines that include musicology, ethnomusicology, pedagogy, psychology, anthropology, sociology and others. All document types and media such as books, conference proceedings (going back to 1835), journal articles, dissertations as well as internet resources, sound recordings and motion pictures are included. RILM also features bilingual abstracts and all non-Roman scripts.



Searching: **The Music Index Online, Academic Search Premier, Humanities International Complete, RILM Abstracts** [EASTERN ILLINOIS UNIV](#)

of Music Literature [Show Less](#) [Choose Databases >](#)

in **Select a Field (optional)** ?

and in **Select a Field (optional)**

and in **Select a Field (optional)** [Add Row](#)

[Basic Search](#) [Advanced Search](#) [Visual Search](#) [Search History/Alerts](#) [Preferences >](#)

Search Options

- Search modes** ?
- Boolean/Phrase**
 - Find all my search terms
 - Find any of my search terms
 - SmartText Searching [Hint](#)

- Apply related words**
- Also search within the full text of the articles**

Limit your results

Linked Full Text

Publication Name

Image Quick View

Published Date from Month Year: to Month Year:

References Available

Scholarly (Peer Reviewed) Journals

- Image Quick View Types**
- Black and White Photograph
 - Color Photograph
 - Graph
 - Map
 - Chart
 - Diagram
 - Illustration



Address staffing issues:

- Integration into library website
- Building search boxes
- Additional programming / configuration
- Creation of subcategories
- Workflow within the library
- Staff and patron training
- Integration into library instruction

Track relevant statistics:

- Useful statistics module mandatory!
 - Are users finding what they need?
 - What percentage click on the full record?
 - What percentage view subsequent sets of records?
 - What is the average response time?

Database activity, July-Sep 2008

	A	B	C	D	E	F	G
1	Database	Searches	Full Record	Next Set		% Full Record	% Next Set
2							
3	JSTOR	2733	506	162		19%	6%
4	Lexis-Nexis - Major Papers	2617	88	35		3%	1%
5	Lexis-Nexis - Magazines	2593	215	69		8%	3%
6	Academic Search Premier	2358	375	72		16%	3%
7	PsycInfo	2275	249	315		11%	14%
8	Lexis-Nexis - Law Reviews	2233	0	0		0%	0%
9	APA PsycArticles	2230	80	10		4%	0%
10	Expanded Academic ASAP	2171	109	24		5%	1%
11	OCLC ArticleFirst	2140	290	32		14%	1%
12	ERIC	1103	310	62		28%	6%
13	PubMed	878	337	46		38%	5%
14							

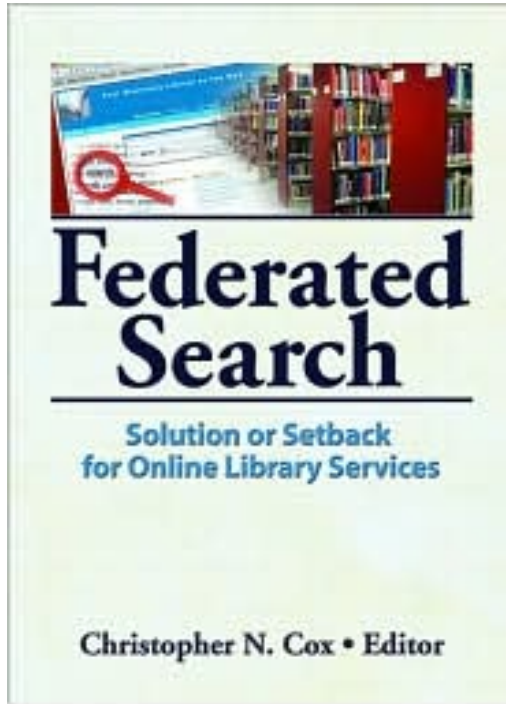
Track relevant statistics:

- Interpret other database usage stats in the context of federated search
 - Is usage for any database being inflated because of federated search system?
 - Perform side-by-side comparisons of usage stats: native interface vs. federated search engine

Test new products thoroughly:

- Set up test environment with vendor
- Organize focus groups with librarians
 - public services
 - technical services
 - systems
- Organize focus groups with students / other library patrons
- Keep expectations reasonable!
- Read articles, reviews, relevant blogs; attend webcasts

Suggested resources:



Cox, Christopher N., ed. *Federated Search: Solution or Setback for Online Library Services*. Binghamton, NY: Haworth Press, 2007. Also published as v.12 no.1-2 and 3-4 of *Internet Reference Services Quarterly*. Lengthy annotated bibliography at end.

Warren, Dennis. "Lost in Translation: The Reality of Federated Searching." *Australian Academic & Research Libraries*, Dec. 2007, Vol. 38 Issue 4, 258-269.