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## Embedding Metalib in Database Webpages: Usability Issues

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# Embedding MetaLib In Database Web Pages: Usability Issues

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Using [HTML Slidy](#): Click anywhere on the slide to go to the next slide. Use Help below to see more options.

## Overview

- I hope to leave you with a better understanding of
  - How simple design decisions for database pages and MetaLib affect usability
  - How to conduct Usability Scenarios and interpret the results
  - How usability scenario results can feed into design decisions
- I will talk about:
  - UCF's design choices for database and MetaLib pages
  - The Usability Scenario study and results
  - Design changes made or planned based on results

## Usability Scenario's in a Nutshell

- Ask users to try to complete tasks using your site or system
- Record the efforts and whether the task could be completed.
- UCF's Usability Scenario
  - Used Camtasia to record the screens as students tried to use the web and our database pages to find articles on a topic
  - Ask students about their level of satisfaction with the process and results for each task
  - Analyzed the recordings to see the choices students made, what worked, what problems were encountered
  - Made design changes

## UCF's Database Page Choices

- Easy Access v. Authentication
  - Access will be as open as possible - no login needed to see our title lists, easy to link to, findable in web search engines
- Site Integration v. Distinctive Look and Navigation
  - Pages will integrate into our overall website with consistent graphical elements and navigation
- Flexibility v. Controlled Content and Organization
  - Pages will include any resources in whatever order and organization is appropriate
- Embed Functionality v. Linking
  - Highly used functionality should be immediately available on the pages, i.e. catalog search, online journal title search, and database search
- Quick view of [UCF's database pages prior to the study](#)

## UCF's MetaLib Choices

- Access and Privacy v. Identification and Personalization

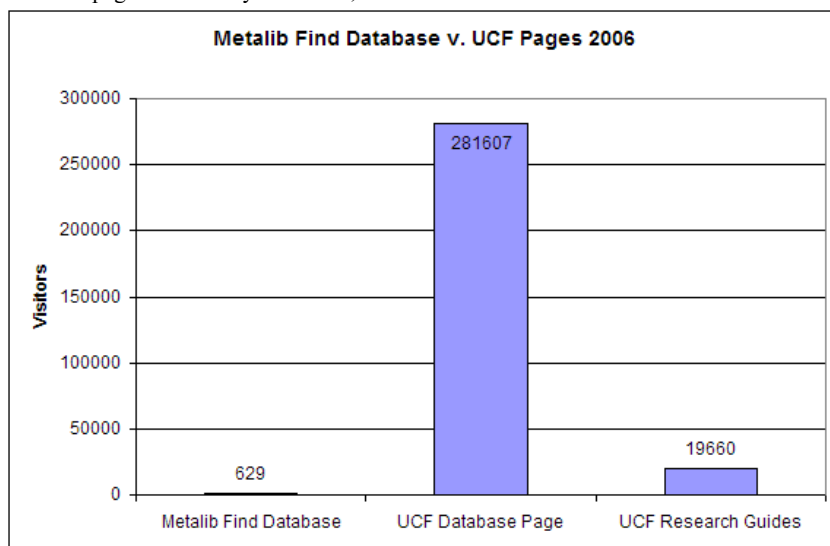
- Login should not be required unless user decides to personalize the account
- Power and Functions v. Consistent Interface
  - Federated searching prevents access to specialized options and retrieval sets may not include the most relevant hits
- Design Flexibility, Control v. Single Database Discovery Site
  - Maintain Database discovery pages on our website and deemphasize MetaLib Find Database
- Consistent Result Options v. Inclusiveness of Databases
  - Focus on titles that are fully functional in MetaLib
- Speedy and Focused v. Comprehensive Searching
  - Keep search sets small, using a few sources for each subject.

## Realities of UCF's Database Pages and MetaLib

- Do not have much staff time to dedicate to database pages (a fraction of my time)
- Consortial MetaLib installation hosted by FCLA
- MetaLib was purchased at the same time as Aleph, so not specifically chosen by UCF for functionality
- Do not have much staff time to dedicate to MetaLib ( a fraction of Ying's time)
- Very little interface customization in v.3

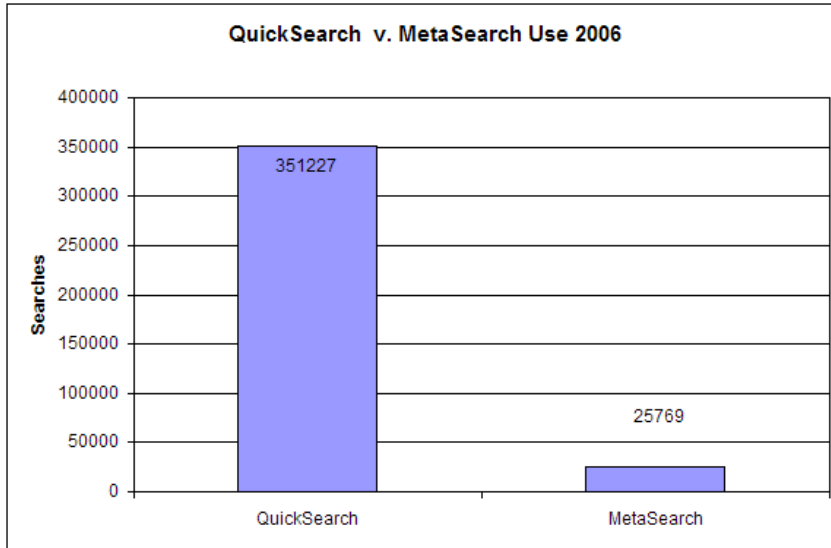
## Database Page Stats

- Database pages are heavily used: 281,607 visitors in 2006



# QuickSearch and MetaLib Stats

- Quick Search is used much more than any other MetaLib service



## Purpose of the Usability Project

- Find out what students try first when given a research task
- Get an overall picture of how students use the database pages
- See if and how students were interacting with MetaLib search forms
- Determine which options on the database pages lead to the most success and user satisfaction

## Methodology: Usability Scenarios

- Collaborated with Meg Scharf, Associate Director for Public Services, and Karla Kitalong, UCF professor usability researcher
- Wrote scenarios - brief tasks that users will try to complete
- Beta tested the scenarios with the help of a graduate student
- Created web pages for a demographic survey and scenario instructions
- Employed an undergraduate student, Jodi, to serve as recruiter and interviewer
- Took a laptop into student areas to recruit participants and record each session
  - [How to use Camtasia](#) - 6K in Quicktime

## Usability Tasks

- Starting from four different points on the web: *Find articles or other resources on the career benefits of internships for college students.*
- Tasks start points are:
  - Blank page
  - Database page main area
  - Database page side menu
  - Detailed Subject Resource Guides
- Users were not specifically steer users to MetaLib

## Sample Task Description and Satisfaction Survey

### Task A

What do you typically do when you need to find references to use for a paper or project?

Find articles or other resources on the career benefits of internships for college students.

### Begin Task A

Don't forget to talk about the web pages, your search, and the results!

How satisfied are you with the **results** of your search for Task A?

Very satisfied <-----> Not satisfied  
☐ ☐ ☐ ☐ ☐

Overall, how satisfied are you with the **process** you used for Task A?

Very satisfied <-----> Not satisfied  
☐ ☐ ☐ ☐ ☐

## Sample Recordings: in Quicktime and How

- [Demographic and Task Satisfaction Surveys](#) - 3K
- [Task A](#) - use the information source of your choice. - 1.6 K
- [Task B](#) - use the main portion of the database page - 2.3K
- [Task C](#) - use the side menu on the database page - 1.6K
- Task D- use the Research Guides page

## Evaluation of the Usability Scenario Process

- Focus on one or two Tasks - 4 was too many
- Beta test to work out unclear wording, awkward transitions, starting and stopping recording
- The interviewer may have to coax verbal comments out of participants
- Each interaction takes 20-40 minutes
- Provides very rich information source

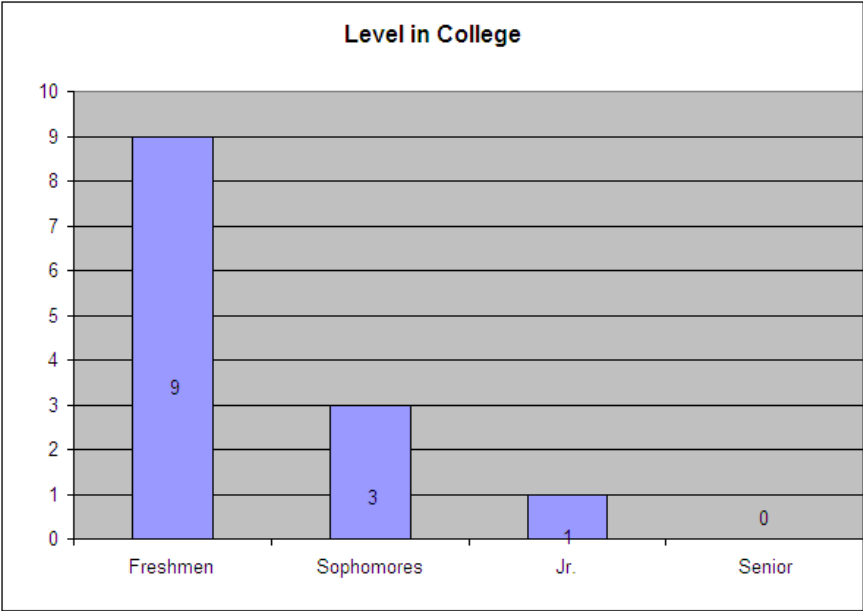
## Data Gathering Process

- Demographic survey and satisfaction ratings were captured into [CSV files](#)
- Screens and voices were recorded for entire scenarios
- Jodi wrote "reflections" of her observations for each interaction.
- We reviewed each recording, entered data for search options chosen and the search terms used

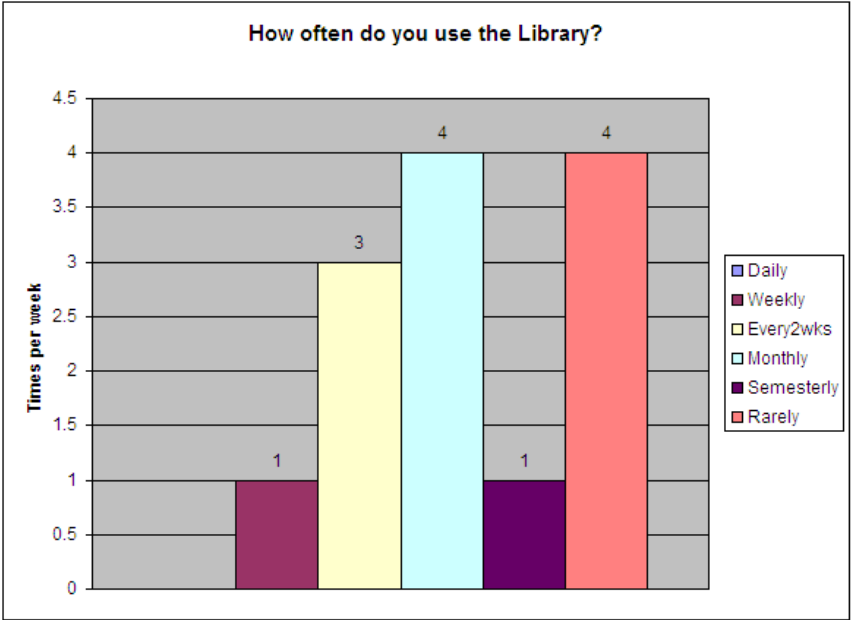
## Behavior Observations

- Students usually entered the topic exactly as we gave it - none used synonyms
- Students often don't relate specific terms or topics with broader concepts
- Students report high satisfaction if words on the web site exactly match their concept
- Students tend to use a search box before browsing subject or alphabetical database lists
- Students click on what comes up fastest rather than waiting for full results to load
- Off-campus login process often hindered use of the embedded form
- Prior instruction influenced student search behavior

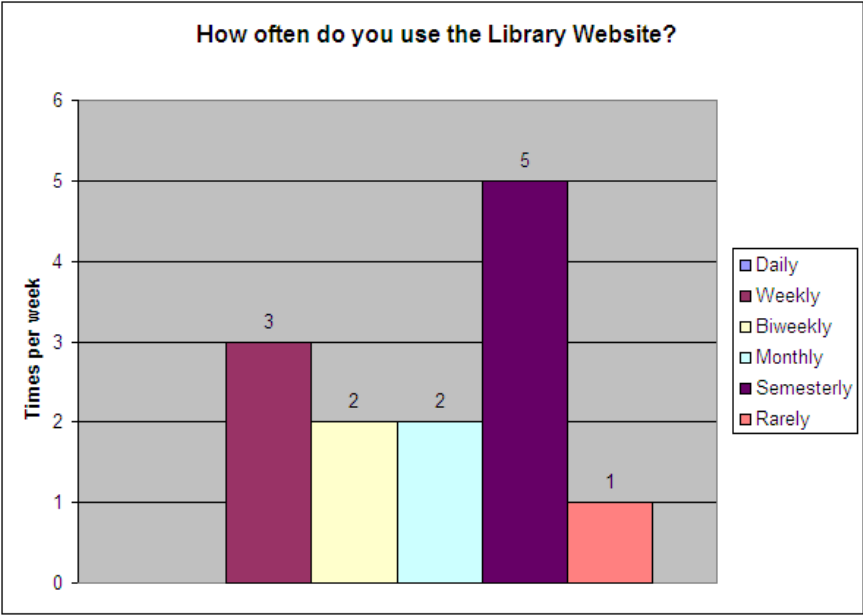
# Digging into the Data: Demographics



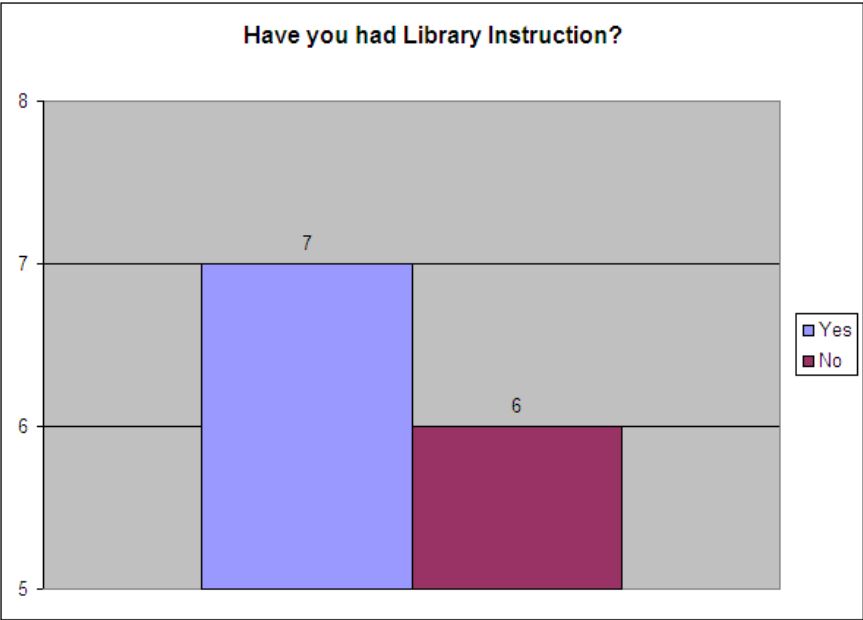
## How often do you use the library?



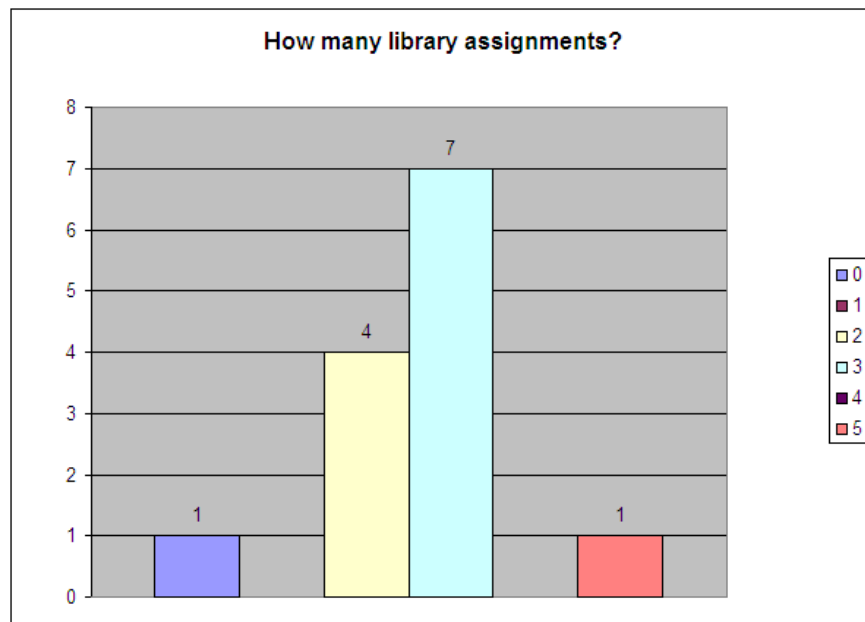
# How often do you use the library website?



# Have you had library instruction?



## How many library assignments?



## Digging into the Results: Resource Chosen and Full Text Found

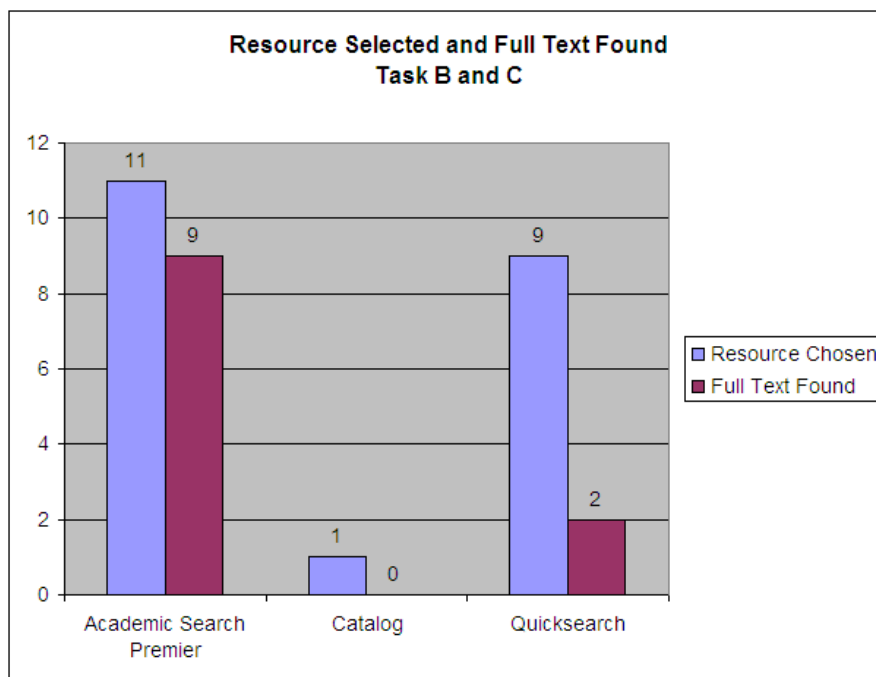
Resource chosen from Database Page	Times Chosen	Full text found	
Academic Search Premier	5	3	60%
Professional Collection	1	1	100%
QuickSearch	5	1	20%
<b>Total</b>	11	5	45%

Resource chosen from Side menu	Times Chosen	Full text found	
Academic Search Premier	4	4	100%
Ask a Librarian	1	0	0%
Business Dateline	1	1	100%
Catalog	1	0	0%
QuickSearch	4	1	25%
<b>Total</b>	11	6	55%



## Chart of Resources Chosen Task B and C



## Resource Selected and Satisfaction

Resource Chosen	Times Chosen	Process Satisfaction	Results Satisfaction
QuickSearch	9	2.7	2.6
Academic Search Premier	9	4.3	3.7
Business Dateline	1	3.0	4.0
Ask a Librarian	1	5.0	5.0
Catalog	1	4.0	2.0

## Other Data Analysis Possibilities

- Path taken per task
- Time taken per task and per resource selected
- Relationship between full text found and satisfaction
- Relationship between prior library experience and satisfaction
- And much, much, more!

## Design Concerns Revealed And Potential Fixes

- MetaLib form attracts users who don't know what it does
  - Reduce the prominence of the MetaLib form
  - Add explanation of what MetaLib searches do
- Duplication of MetaLib form (in the main area and in the side menu of the database page confused users)
  - Remove form from side menu
- SFX was ignored - students did not know what it does
  - Add explanations of SFX on the database page
  - Add explanations of SFX on MetaLib results pages

# Design Concerns Revealed Continued

- Students don't login to EZproxy before using the forms
  - Redesign the consortial QuickSearch screen
  - Make login form more noticeable
  - Figure out how to make embedded forms use the proxy
- Students try to use the back button to return to the database pages after using MetaLib
  - Open MetaLib search results in a new window
  - Add warning that they are leaving Library web site
  - Add obvious navigation back to the Database page
  - Hope MetaLib 4 works with the back button
- Students do not know what to do after reaching a MetaLib result record
  - Add help on the results screen explaining how to check for full text, search the catalog, etc.
  - Add a research steps guide on the database pages that reveals what to do after getting a citation

## Database Page Changes

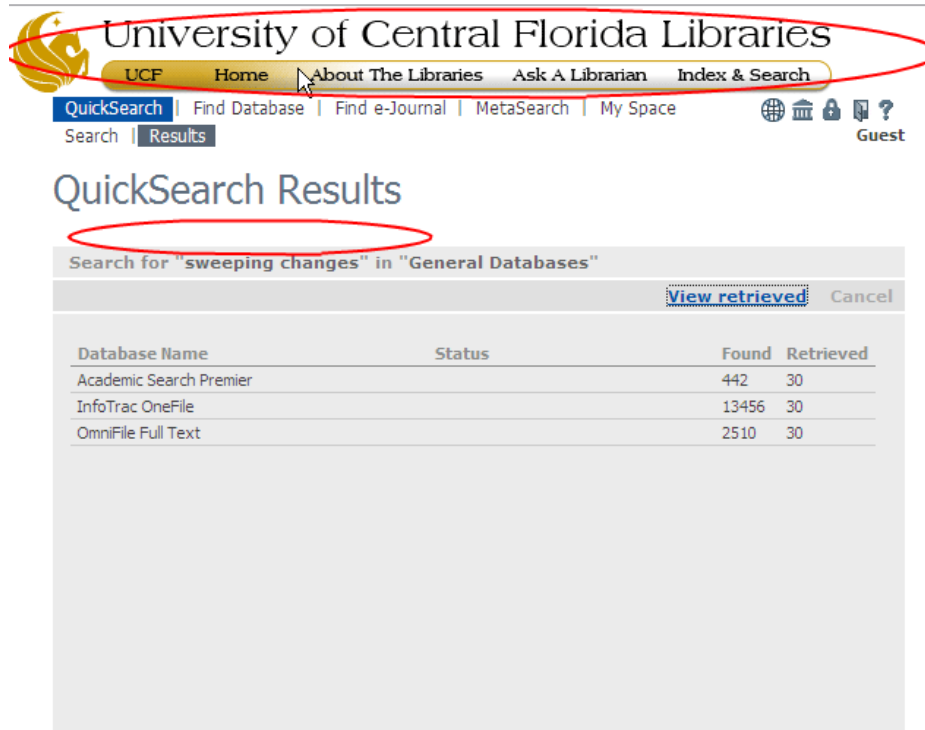
The screenshot shows the University of Central Florida Libraries website. Several design concerns are highlighted with red circles:

- Left Navigation Menu:** A circle around the 'Articles & Databases' section, which includes links like 'Find Books', 'Databases A-Z', 'Online Journals', 'Off Campus Access', 'Research Guides', and 'Terms of Use'. Another circle is around the 'Need Help? Ask!' section with 'Use SFX for Full Text and More' and SFX icons.
- Search Section:** A circle around the 'Catalog Search' and 'Website Search' fields, which include a 'Search' button and a 'Keyword(s) Anywhere' dropdown.
- Database Login:** A circle around the 'Library ID Number' and 'Password' fields, with a 'Login' button and a link to 'EZProxy Login Help'.
- Database Titles:** A circle around the 'Database Titles' section, which includes a 'Pick a Subject' table and a 'Need Help? Ask a Librarian' link.
- Quick Searches:** A circle around the 'Articles MetaSearch' section, which includes radio buttons for 'General', 'Business', 'Education', and 'Nursing', a 'Go' button, and a note about selected databases.

The 'Pick a Subject' table lists various subjects and their corresponding databases:

Pick a Subject	
Popular Databases	History
Arts	Humanities
Books Catalogs & Libraries	Language & Literature
Books Reviews & Publishers	Medicine & Health
Business & Economics	News & Current Events
Computers & Electronics	Public Affairs & Law
Education	Reference
Engineering	Sciences
General & Interdisciplinary	Science Journals - Full Text
Government	Social Sciences

## MetaLib Changes Planned or Desired: Retrieval Screen



University of Central Florida Libraries

UCF Home About The Libraries Ask A Librarian Index & Search

QuickSearch | Find Database | Find e-Journal | MetaSearch | My Space

Search | Results

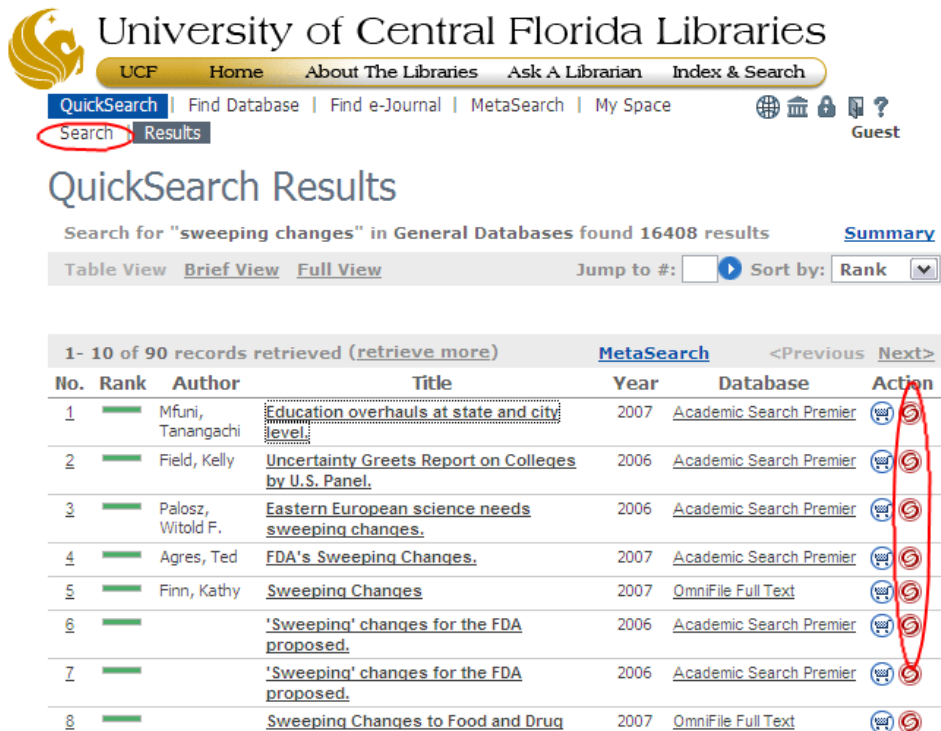
QuickSearch Results

Search for "sweeping changes" in "General Databases"

[View retrieved](#) Cancel

Database Name	Status	Found	Retrieved
Academic Search Premier		442	30
InfoTrac OneFile		13456	30
OmniFile Full Text		2510	30

## MetaLib Changes Planned or Desired: Results Screen



University of Central Florida Libraries

UCF Home About The Libraries Ask A Librarian Index & Search

QuickSearch | Find Database | Find e-Journal | MetaSearch | My Space

Search | Results

QuickSearch Results

Search for "sweeping changes" in General Databases found 16408 results [Summary](#)

Table View [Brief View](#) [Full View](#) Jump to #:  Sort by: Rank

1- 10 of 90 records retrieved ([retrieve more](#)) [MetaSearch](#) <Previous Next>

No.	Rank	Author	Title	Year	Database	Action
1		Mfuni, Tanangachi	Education overhauls at state and city level	2007	Academic Search Premier	<a href="#">Full Text</a>
2		Field, Kelly	Uncertainty Greets Report on Colleges by U.S. Panel	2006	Academic Search Premier	<a href="#">Full Text</a>
3		Palosz, Witold F.	Eastern European science needs sweeping changes.	2006	Academic Search Premier	<a href="#">Full Text</a>
4		Agres, Ted	FDA's Sweeping Changes.	2007	Academic Search Premier	<a href="#">Full Text</a>
5		Finn, Kathy	Sweeping Changes	2007	OmniFile Full Text	<a href="#">Full Text</a>
6			'Sweeping' changes for the FDA proposed.	2006	Academic Search Premier	<a href="#">Full Text</a>
7			'Sweeping' changes for the FDA proposed.	2006	Academic Search Premier	<a href="#">Full Text</a>
8			Sweeping Changes to Food and Drug	2007	OmniFile Full Text	<a href="#">Full Text</a>





# MetaLib Changes Planned or Desired: Record View

## QuickSearch Results

Search for "sweeping changes" in General Databases found 16408 results

[Table View](#) [Brief View](#) [Full View](#) Jump to #:  Sort by: [Rank](#) ▼

1 of 90 records Do More with [MetaSearch](#) <Previous Next>

**Resource:** Academic Search Premier  
**Title:** Education overhauls at state and city level.  
**Author:** Mfuni, Tanangachi  
**Add.Author / Editor:** Mfuni, Tanangachi  
**Citation:** New York Amsterdam News 2/1/2007, Vol. 98 Issue 6, p39-44  
**Year:** 2007  
**Abstract:** The article focuses on the proposal of Eliot Spitzer, New York State Governor, to make sweeping changes to the education system of the state. Educators have praised his proposal. The plan calls for increased funding to schools, closure of failing institutions and an increase of charter schools from the current limit of 100 schools to 250, among other reforms. The announcement came after New York City Mayor Michael Bloomberg revealed some education reforms in his State of the City address.  
**Subject:** SPITZER, Eliot  
NEW YORK (State)  
CHARTER schools  
EDUCATION & state  
EDUCATIONAL change  
EDUCATIONAL planning  
GOVERNORS -- New York (State)  
**ISSN:** 0028-7121  
**IDNumber:** 921110  
**external:** <http://content.epnet.com/ContentServer.asp?T=P&P=AN&K=24419731&EbscoContent=dGJyIMMvI7ESepri4yOvsOLCmrk%2Bep7dSsga4TLwXWXS&>

## More MetaLib Changes Coming in v4

- Recreate embedded forms
- Use the improved CSS to better implement UCF's style in MetaLib
- Customize help screens
- Add facets and match the look of our [Endeca catalog](#) as much as possible

**Thank you!**

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