Is one stop shopping all we dreamed it would be?
Usability and the Single Search Interface

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Introduction
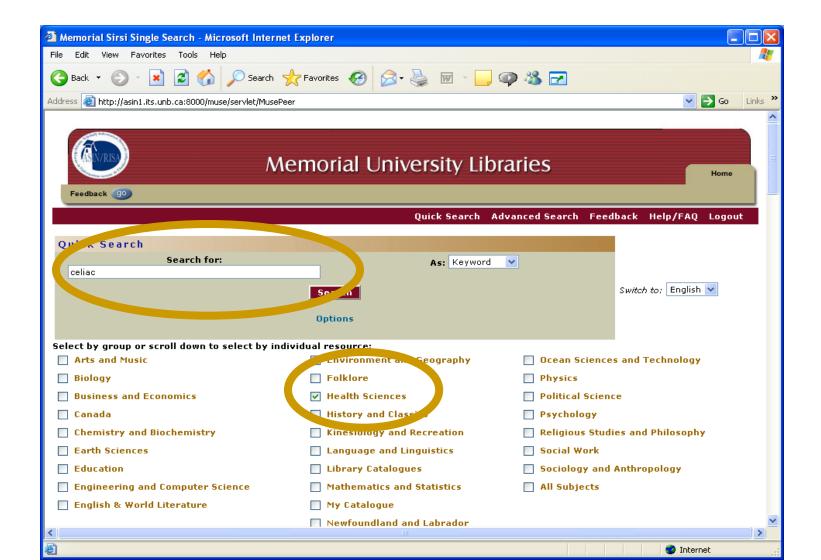
- What is single search?

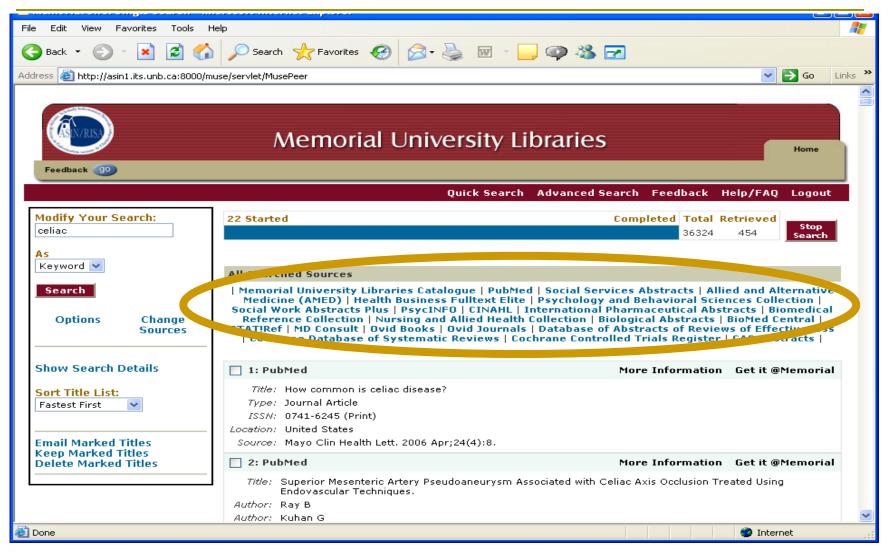- About usability testing

- The results

- What is next?

Federated Searching at Memorial

- SingleSearch (one interface…many resources)

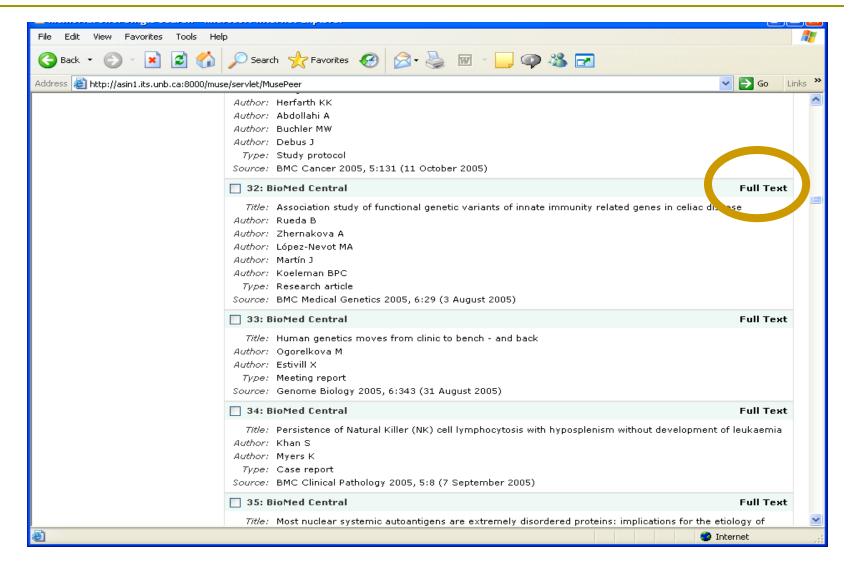- Resolver (links to our full-text & holdings)
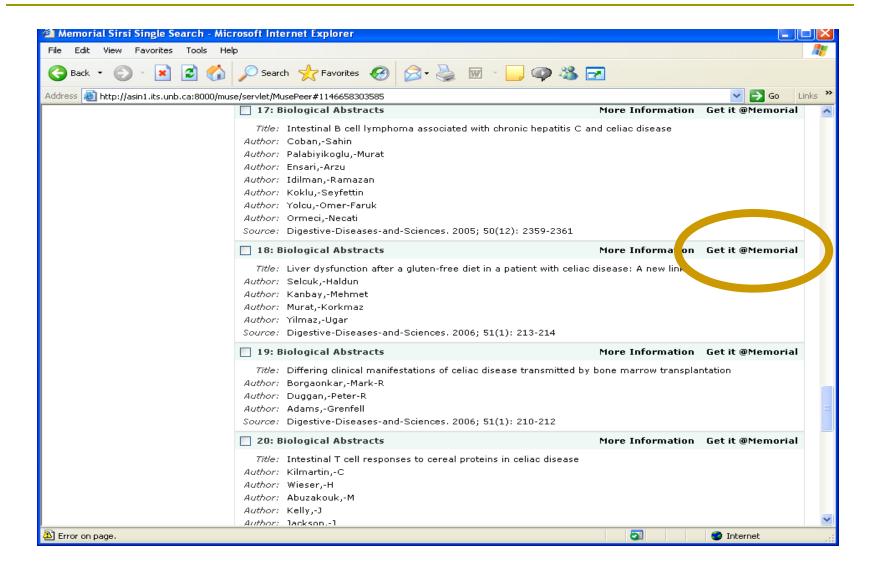
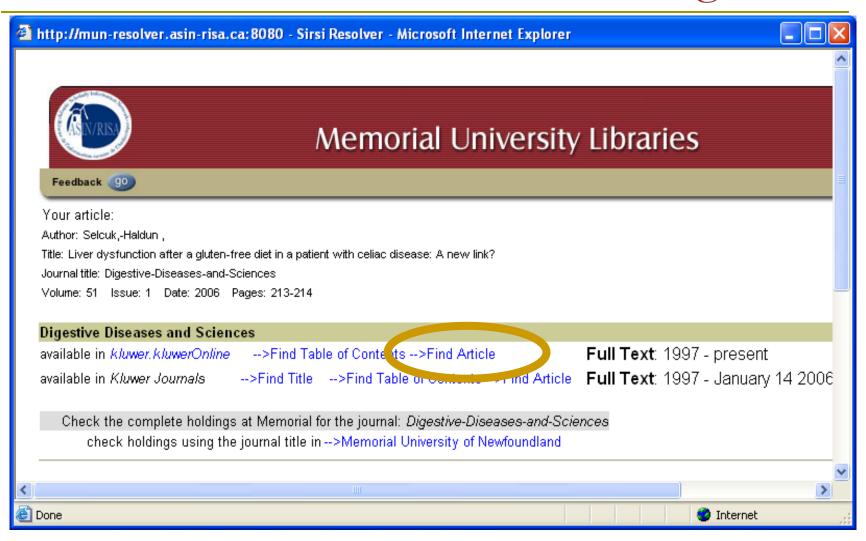- RELAIS (document delivery)

One interface…

…for many sources…

…leading to full text…

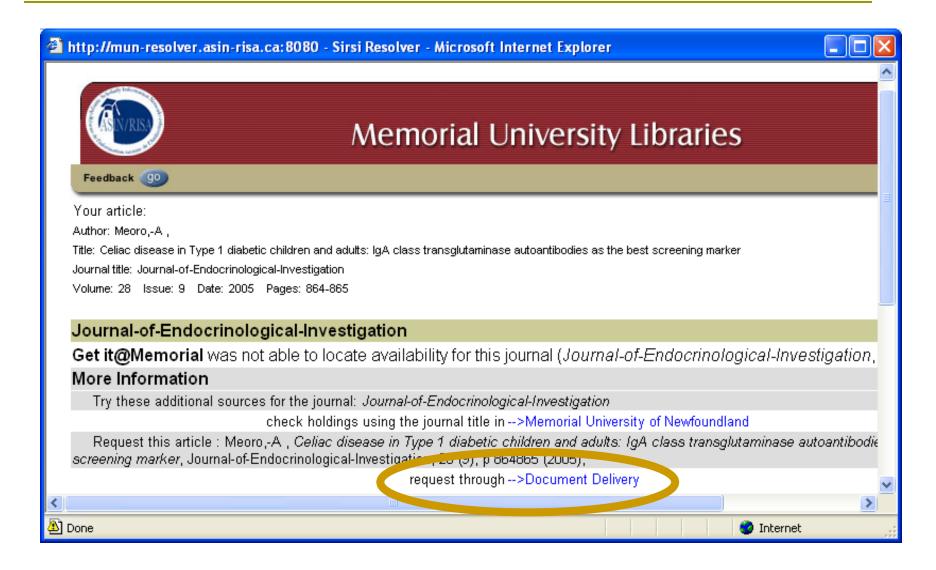# …or to a check of our holdings…

…Resolver links to online holdings…

…or to Relais (document delivery system)

http://mun-resolver.asin-risa.ca:8080 - Sirsi Resolver - Microsoft Internet Explorer

Memorial University Libraries

Feedback go

Your article:

Author: Meoro,-A ,

Title: Celiac disease in Type 1 diabetic children and adults: IgA class transglutaminase autoantibodies as the best screening marker

Journal title: Journal-of-Endocrinological-Investigation

Volume: 28   Issue: 9   Date: 2005   Pages: 864-865

Journal-of-Endocrinological-Investigation

Get it@Memorial was not able to locate availability for this journal (*Journal-of-Endocrinological-Investigation*,

More Information

Try these additional sources for the journal: *Journal-of-Endocrinological-Investigation*

check holdings using the journal title in -->Memorial University of Newfoundland

Request this article : Meoro,-A , *Celiac disease in Type 1 diabetic children and adults: IgA class transglutaminase autoantibodie* *screening marker*, Journal-of-Endocrinological-Investigation, 28 (9), p 864865 (2005),

request through -->Document Delivery

Done   Internet

What is usability?

Help users overcome technology and make it easy and efficient and pleasant for them to use.

Jakob Nielsen

Nielsen Norman Group

Advantages of usability

- Save the user time

- Save the organization time & money

- Counter the whims of the designer

- Good PR for the library

- Settles disagreements among design team members

Test Audience

- 12 participants from three MUN Libraries

- 5 males and 7 females

- 7 undergradutes, 3 graduate and 2 faculty

- Ages ranged from under 20 to 49

Survey Tasks

- Select categories & resources

- Find & check holdings for a book

- Find & check holdings for an article

- Navigate the Resolver

Sample Questionnaire

Task IV: Reviewing Results

1. Look through the results and find a book.

A. In the first page of results, is there a book?

__ Yes   __ No   __ I don't know

B. If you answered YES to A, please note the following:

Title of Book: _____

Author of Book:_____

Name of library/libraries that own this book (write "do not know" if you are unsure of the answer):

_____

2. Look through the results and find an article.

A. In the first page of results, is there an article?

__ Yes   __ No   __ I don't know

B. If you answered YES to A, please note the following information:

Title of Article:_____

Test Materials & Analysis

- Test Materials
  - Pre-test: demographic and library use data
  - Survey: completed as participants completed the tasks
  - Post-test" participant impressions of single search

- Analysis
  - Quantitative data analyzed by SPSS
  - Screen captures analyzed with a variety of tools (click path analysis)

Results!

- The expected…
- The unexpected…
- The bonus material

Overall Performance

Difficulty understanding layout of search

Select by group or scroll down to select by individual resource:

- ☐ Arts and Music
- ☐ Biology
- ☐ Business and Economics
- ☐ Canada
- ☐ Chemistry and Biochemistry
- ☐ Earth Sciences
- ☐ Education
- ☐ Engineering and Computer Science
- ☐ English & World Literature

- ☐ Environment and Geography
- ☐ Folklore
- ☐ Health Sciences
- ☐ History and Classics
- ☐ Kinesiology and Recreation
- ☐ Language and Linguistics
- ☐ Library Catalogues
- ☐ Mathematics and Statistics
- ☐ Memorial University Libraries Catalogue
- ☐ Newfoundland and Labrador
- ☐ News

- ☐ Ocean Sciences and Technology
- ☐ Physics
- ☐ Political Science
- ☐ Psychology
- ☐ Religious Studies and Philosophy
- ☐ Social Work
- ☐ Sociology and Anthropology
- ☐ All Subjects

Select individual resources:

- ☐ **Arts and Music**
- ☐ America: History and Life
- ☐ Art Index
- ☐ ArtCyclopedia
- ☐ British Museum
- ☐ Canadian Music Periodicals Index
- ☐ CBCA Current Events
- ☐ CBCA Reference
- ☐ International Index to Music Periodicals
- ☐ Wilson OmniFile Mega Edition
- ☐ **Biology**

- ☐ **News**
- ☐ CBCA Current Events
- ☐ CBCA Reference
- ☐ GoogleNews
- ☐ PAIS International
- ☐ Regional Business News
- ☐ Wilson OmniFile Mega Edition
- ☐ **Ocean Sciences and Technology**
- ☐ Applied Science and Technology
- ☐ ASFA: Aquatic Sciences and Fisheries Abstrac
- ☐ EICompendex

Participants selected many resources/categories to search

- For the question, "*Find information on the evolution of the human skeleton*" participants selected an average of 2.5 categories and 3.25 resources.

	Categories Selected	Resources Selected
M	2.0	3.25
Mdn	2.0	1
σ	1.348	4.845

- Equals approximately 25 databases being searched

Lots of clicking & Lots of hovering

- Participants were asked to select "Get It@Memorial" and navigate to Library holdings.
  - Took participants an average of 9 clicks to reach an article/holdings or to give up.
  - Participants who were successful took an average of 6 clicks.
- Participants were asked to choose an article citation and determine if it were available online or whether MUN owned it.
  - Took participants a average of 5 min. & 10 sec. to complete

Basic search strategies

- None of the participants used sophisticated search techniques like Boolean and/or truncation. I.e.,
  - "Find information on pollution and asthma"
    - pollution asthma (2)
    - asthma pollution
  - "Find information on elder abuse"
    - information on elder abuse
    - elder abuse (2)

Users identified format with ease

- 100% of participants were correctly able to identify whether there was a book and an article on their search results.

- Majority (75%, *n*=12) selected an article where document type was in the Single Search display

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31: Sociological Abstracts

Title: Families Seen Sightseeing: Performativity of Tourist Photography

Author: Larsen, Jonas

Type: Journal Article (aja)

ISSN: 1206-3312

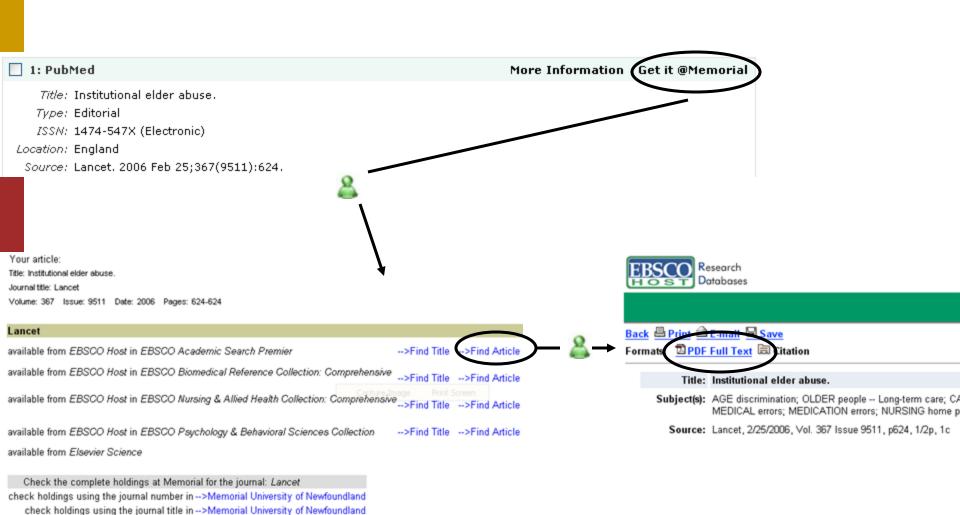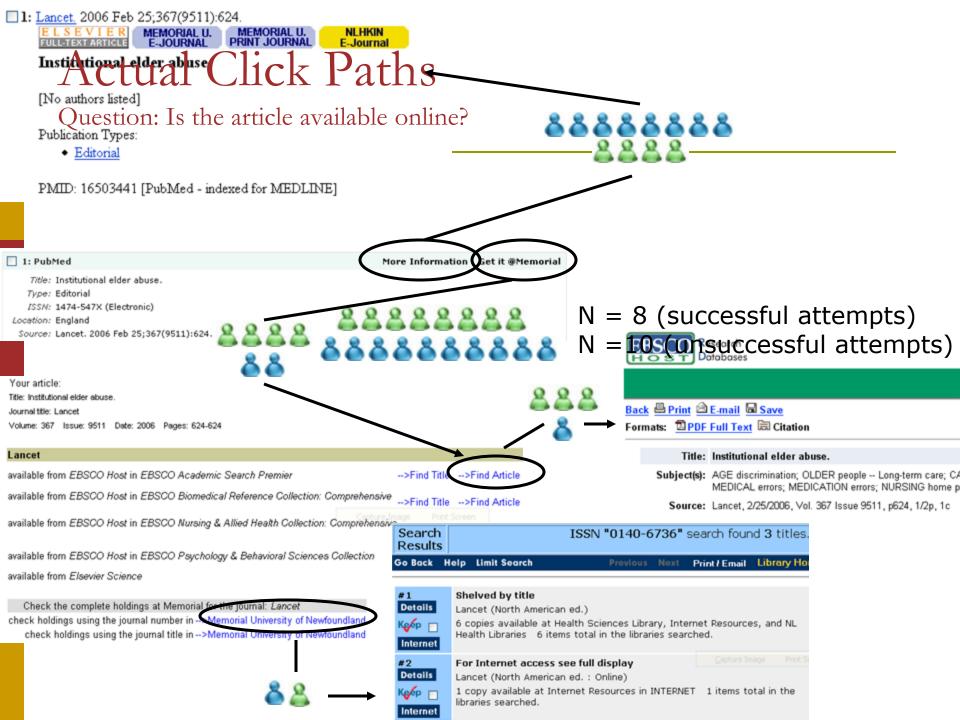Source: Space and Culture, 2005, 8, 4, Nov, 416-434

Majority of users chose "more Information" as a route to holdings

- 2 options in each citation:
  - More Information: Links to native interface
  - Get it@Memorial: Links to Resolver
- Question asked: "Is the article available online (full text)? If not…does any MUN Library have this article?"

Expected Click Path

Question: Is the article available online?

Actual Click Paths

Question: Is the article available online?

☐ 1: Lancet. 2006 Feb 25;367(9511):624.

ELSEVIER FULL-TEXT ARTICLE | **MEMORIAL U. E-JOURNAL** | **MEMORIAL U. PRINT JOURNAL** | **NLHKIN E-Journal**

Institutional elder abuse

[No authors listed]

Publication Types:
- Editorial

PMID: 16503441 [PubMed - indexed for MEDLINE]

☐ 1: PubMed

Title: Institutional elder abuse.
Type: Editorial
ISSN: 1474-547X (Electronic)
Location: England
Source: Lancet. 2006 Feb 25;367(9511):624.

More Information   **Get it @Memorial**

N = 8 (successful attempts)
N = 10 (unsuccessful attempts)

Your article:
Title: Institutional elder abuse.
Journal title: Lancet
Volume: 367   Issue: 9511   Date: 2006   Pages: 624-624

Lancet

available from *EBSCO Host* in *EBSCO Academic Search Premier*   -->Find Title   -->Find Article

available from *EBSCO Host* in *EBSCO Biomedical Reference Collection: Comprehensive*   -->Find Title   -->Find Article

available from *EBSCO Host* in *EBSCO Nursing & Allied Health Collection: Comprehensive*

available from *EBSCO Host* in *EBSCO Psychology & Behavioral Sciences Collection*

available from *Elsevier Science*

Check the complete holdings at Memorial for the journal: *Lancet*
check holdings using the journal number in -->Memorial University of Newfoundland
check holdings using the journal title in -->Memorial University of Newfoundland

Back **Print** **E-mail** **Save**
Formats: **PDF Full Text** **Citation**

Title: Institutional elder abuse.

Subject(s): AGE discrimination; OLDER people -- Long-term care; CA
MEDICAL errors; MEDICATION errors; NURSING home p

Source: Lancet, 2/25/2006, Vol. 367 Issue 9511, p624, 1/2p, 1c

Search Results   ISSN "0140-6736" search found 3 titles.

Go Back **Help** **Limit Search**   Previous Next   **Print / Email**   **Library Ho**

#1 **Details** **Keep** ☐ **Internet**
Shelved by title
Lancet (North American ed.)
6 copies available at Health Sciences Library, Internet Resources, and NL
Health Libraries   6 items total in the libraries searched.

#2 **Details** **Keep** ☐ **Internet**
For Internet access see full display
Lancet (North American ed. : Online)
1 copy available at Internet Resources in INTERNET   1 items total in the
libraries searched.

Bonus Material

- Fascinating insight into how people deal with error messages (which abounded) and other browsing behaviours.
- Example

Conclusions...thus far.

1. Selection of resources to search needs to be simplified
2. Need to include format identifiers (icons/document type field) wherever possible
3. Need to clean up display to aid decision making
4. Need to promote "most efficient" path through the SingleSearch to the article

What next?

- Use the data to develop mocks of different layouts for focus group this summer

- Re-do study when Rooms Portal is implemented?

Users get the last word…

"It displayed a wide range of results with very little effort. Usually I would use google for research for an essay, but after seeing how easily and accurately this system finds and displays information I would rather use it."