



# FEDERATED SEARCH ENGINES

*The Unified Search Environment:*

**The Western Health Experience**

**2006**

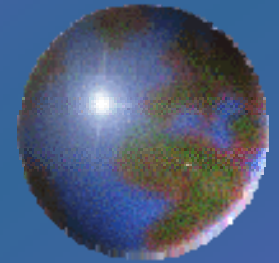
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*Presented by:*

**Vanessa Craven**

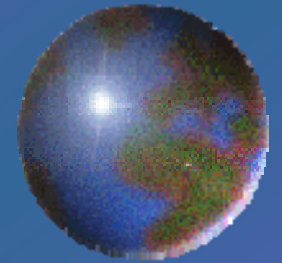


# Success of the Internet



**GOOGLE**™  
Image Search

**amazon.com.**



**Federated search engines**

can 'out-

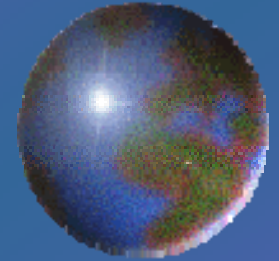


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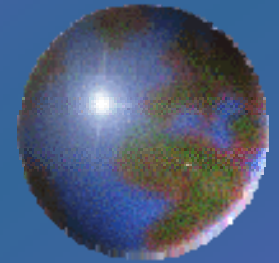
**by 'returning relevant  
results in 'real time'.**

# So what is federated searching?



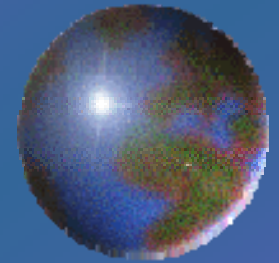
- Parallel searching
- Meta – searching
- Searching in real time
- Information not in silos
- No multiple passwords
- No confusion about sources of information
- The ability to perform a single search

# Authentication



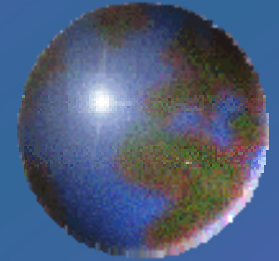
- Access to password protected databases
- IP validation
- Access to licensed users only

# Benefits & Drawbacks of Federated Searching



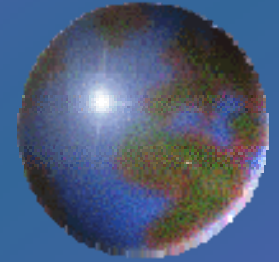
- Saves time for users
- Consolidated mode of access
- Cross searching possible
- It is NOT 'power searching'/'deep searching'
- No true de-duping
- Relevancy ranking limited
- Federated searching is more a service than software

# The process - Implementation Stages



- Project planning
- MetaLib
- SFX (open URL resolver)
- Interface
- Production

# Project Planning



Discussions regarding:

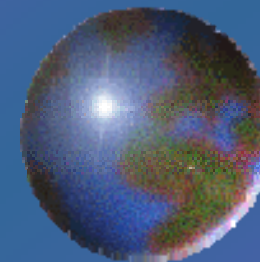
- Content

- Timeframes

- Launch of product



# METLIB

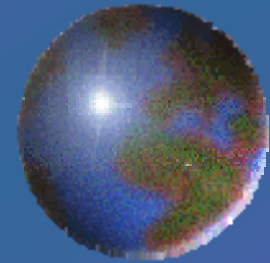


Points to remember when picking a meta-search engine/federated search engine:

The maximum number of resources the software can include

- The ease of setting up resource targets
- Availability of simple search results
- Limiting and refining searches
- Ranking results by relevance
- Export options i.e. print, e-mail, download to Endnote / Procite/ RefWorks etc.
- Adequate statistics and reporting features

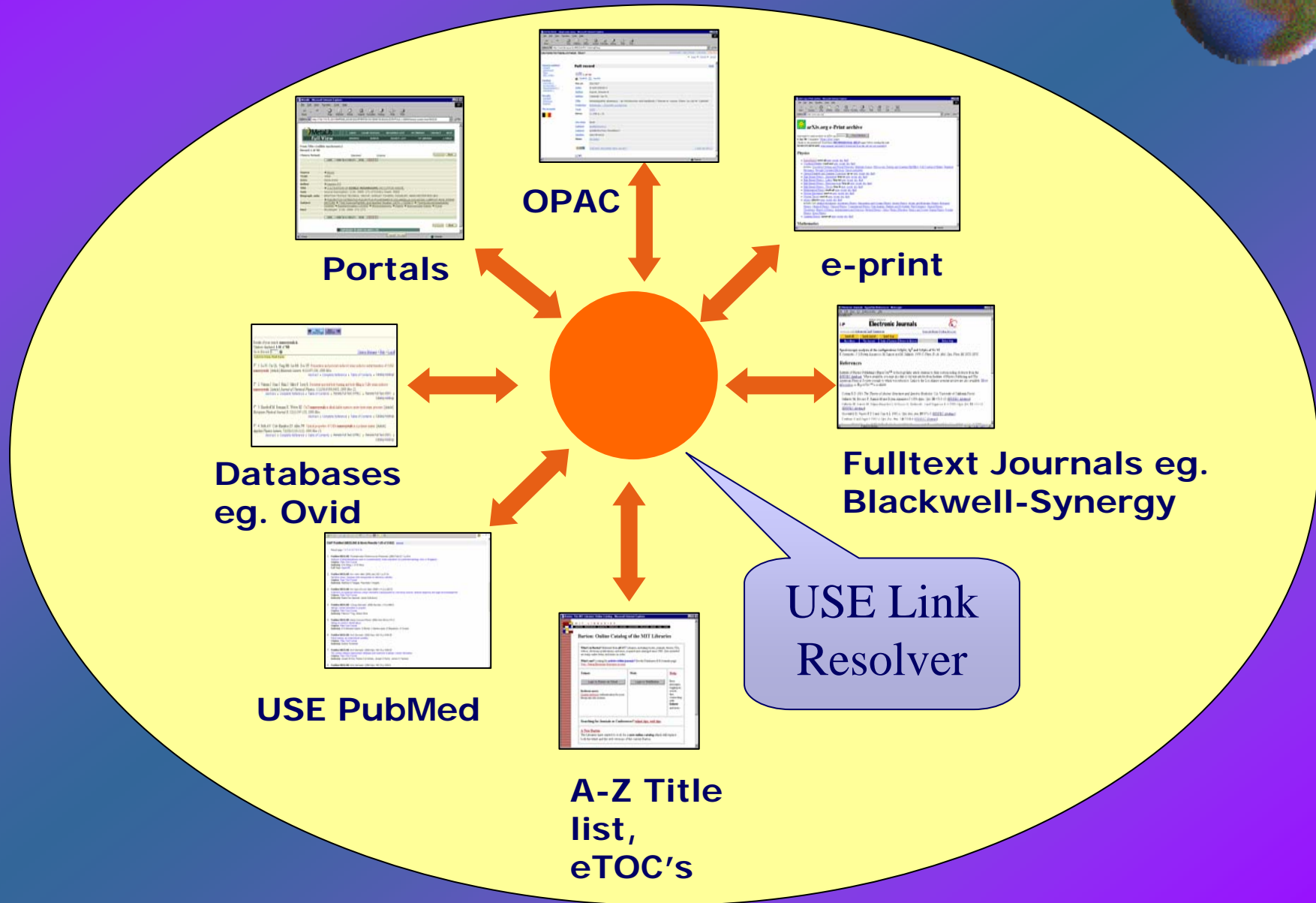
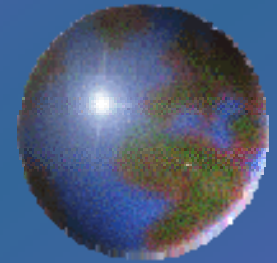
# SFX - Pervasive Open URL Linking



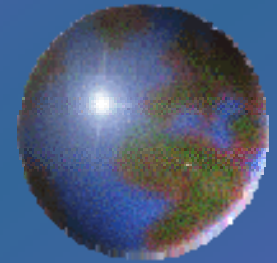
The USE Link Resolver converts standardized Open URL links into the proprietary link used by targets



# Pervasive Open URL Linking



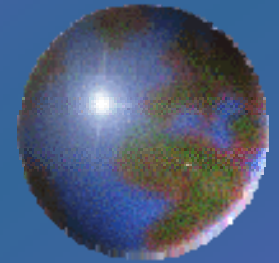
# Interface



What one needs to consider prior to purchasing a Federated Search engine:

- Trial system with in-house databases
- Determine if authentication is possible using your ‘target areas’
- Compatibility with Z.39.50 standards and web standards
- 100% compatibility with in-house and subscribed databases
- Ability to display full-text and true native interfaces
- Open URL compatibility with all databases
- Access to external links via link resolver
- 24x7 monitoring of links by federated search vendor
- Don’t pay a lot of money for a federated search product unless it sits on top of a large and well maintained knowledge base

# Introduction

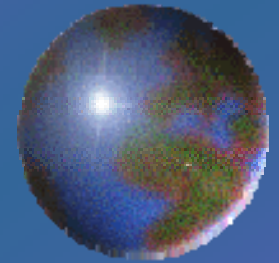


Western Health comprises of :

- Three Teaching Hospitals
  - Williamstown, Western & Sunshine
- Library Service at 3 hospital sites
- Drug & Alcohol Service
- Two nursing homes

*The challenge - to provide equity of access to these geographically set-apart sites*

# The Library's Aim



*“To provide a relevant library information service to Western Health staff and students, with the resources available. To further teaching, research, education and support Health Care Professionals in the provision of quality patient care.”*

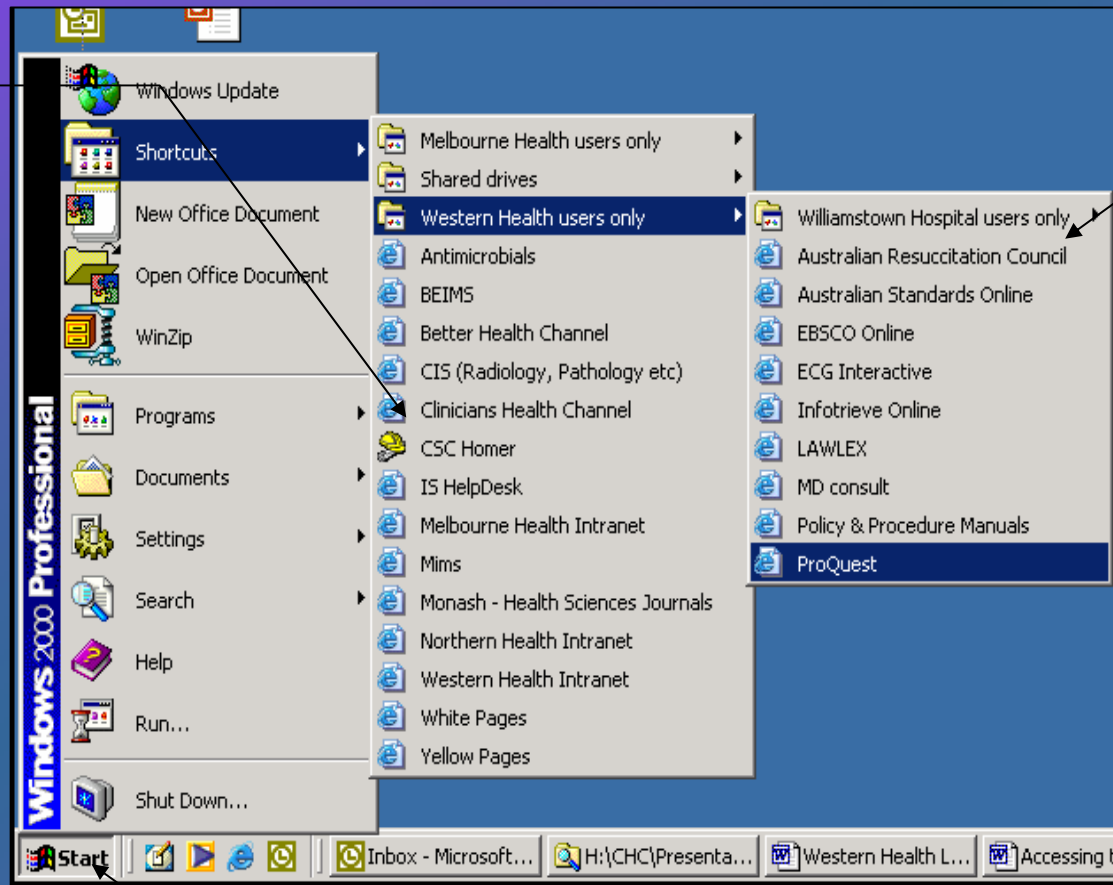
# Start Button Access

## From Chaos!

Click here to access Medline, CINAHL, PsycInfo, full text journals and texts, Micromedix etc.

No passwords required from your work computer.

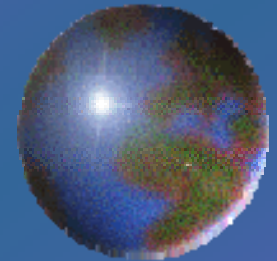
Passwords available for use from home. Contact library.



Contact library for passwords to these databases.

Click here to start.

# To More Chaos!



Western Health Libraries

**ELECTRONIC JOURNAL PASSWORD SHEET**

Please **Do Not** pass on passwords to **non** Western Health Staff/Students

If passwords are abused our suppliers will discontinue access to online journals

**Western Health Electronic Journal Website**

<http://atoz.ebsco.com/home.asp?Id=2473>

The following passwords will help you access journals from different suppliers once you access the above website

**BIOMEDIAL REFERENCECOLLECTION, NURSING & ALLIED HEALTH COLLECTION, PSYCHOLOGY & BEHAVIORAL SCIENCES COLLECTION, HEALTH BUSINESS FULLTEXT**

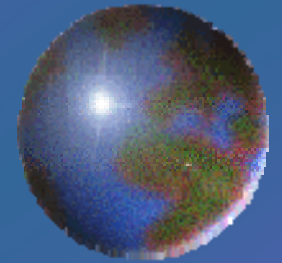
User ID: whlib Password: ebsc704

Full Screen  
Close Full Screen

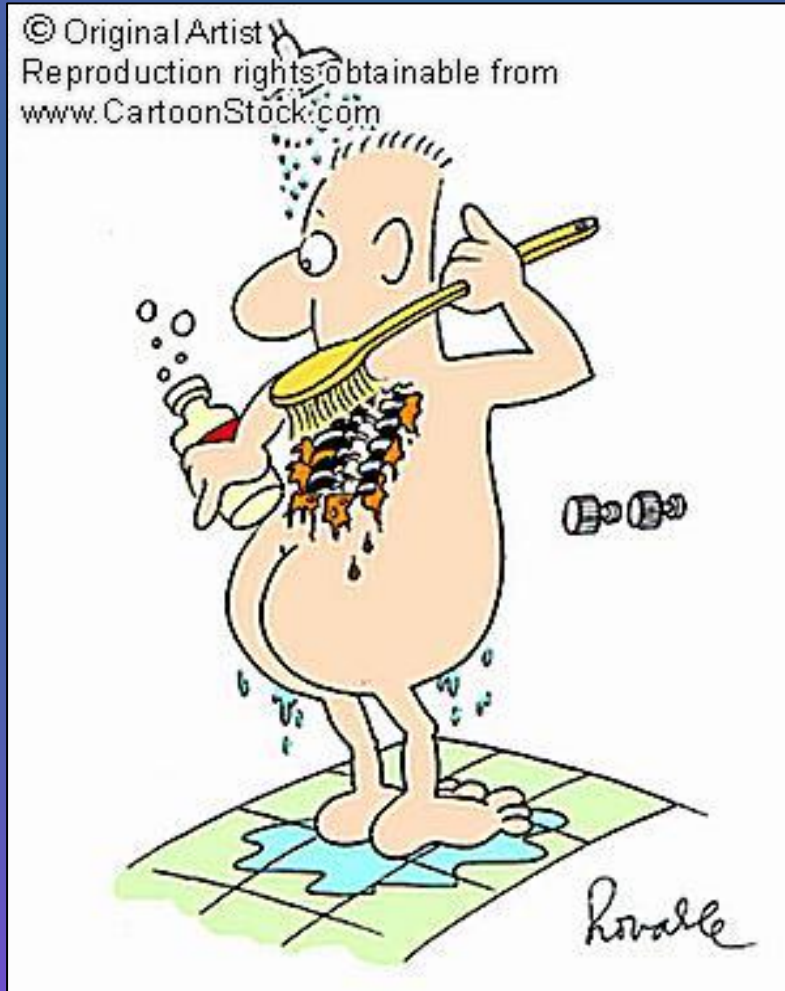
Accessing (otherwise excellent) knowledge sources was complicated – users had to know about multiplicity of passwords, publishers & access locations



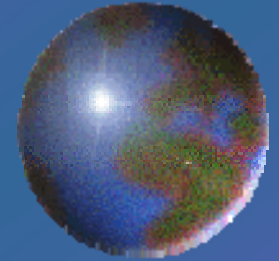
# Scratching...



where it  
*itches!*



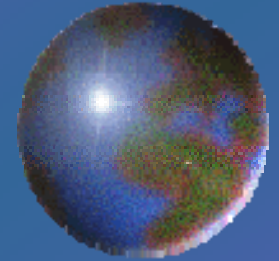
# To Cohesion!



Purchase and implementation  
of a Federated Search Engine

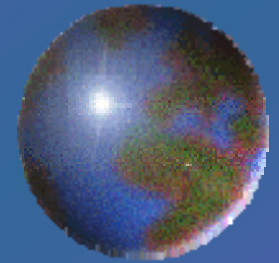
U.S.E – Unified Search Environment

# The Process

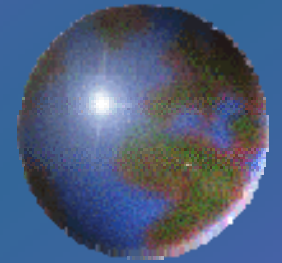


- Writing away for a grant
- Contract with HCN -  
(3 year period 2005–2007)
- Constant communication & continued development - with HCN

# The Process *contd...*

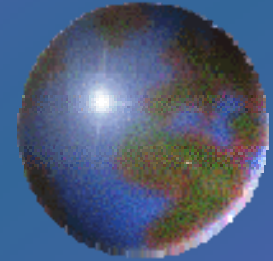


- Vic. DHS (Department of Human Services) purchased USE for Clinician's Health Channel (CHC)
- CHC provided to all Vic. Teaching Hospitals
- U.S.E. - Australia  
(NSW, Northern Territory & ACT, Vic.)



# Project Planning

## WH Subscribed Databases (searchable via U.S.E.):



### *WH In-house & Subscribed Databases:*

MD Consult

Lawlex

Aust. Standards

Up-To-Date

ARCHI

ADCA

### *E-Journals:*

Emergency Med. Abstracts

EJS Host

Ebsco Biomedical Collection

MD Consult

Proquest

CHc (Lww)

VHLC (Science Direct/Wiley)

WH Policy & Procedure Manual

Interactive learning – ECG

Library Catalogue - Horizon

### *Useful links:*

PubMed

NCBI

Health Translations Directory

Australian Red Cross

Better Health Channel / Mayo clinic

Free Medical Books / Evaluating Internet Info.

Historical Anatomies/ The Nat. Autistic Soc.

### *Clinician's Health Channel Databases:*

A-Z (LWW e-journals)

AustHealth & Meditext

Books @ Ovid

CINAHL

MEDLINE / Clinical Evidence

Harrison's Online (textbook)

MIMS

Micromedex

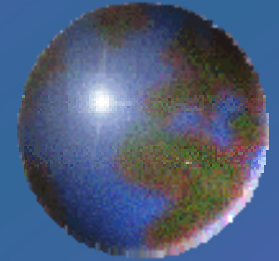
Paediatric Pharmacopoeia

PsycINFO

Therapeutic Guidelines (12 texts)

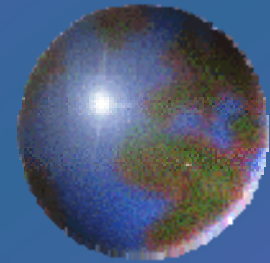
Joanna Briggs Institute

# Production - going live at WH!



- Competition to name the portal (W.H.A.L.E.S)
- Launches at 3 teaching hospitals
- Training sessions
- Promotional events
- Communicated widely to all sectors of Western Health

# Intranet Access to Library Electronic Services (W.H.A.L.E.S.)



Western Health Intranet - Microsoft Internet Explorer

File Edit View Favorites Tools Help


Back Forward Stop Refresh Home Search Favorites Media

Address <http://info.wh.org.au/library/> Go

**Western Health** WH Phone Directory GO

## Western Health Library Resources

Note that some of the following services have restricted access

- **Western Health Access - Library Electronic Service (W.H.A.L.E.S.)**  
**Global Entry Point to all Western Health and Clinicians Health Channel Electronic Resources**
- **WHF Library website**
-  **UpToDate Online Subscription**

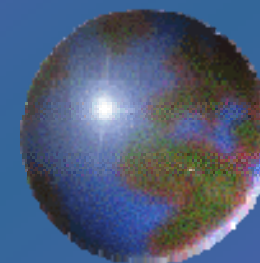
Forms Central  
Phone Directory  
Chief Executive's Bulletin  
Committees  
Corporate Governance  
Legislative Compliance  
JobScene  
Nursing News  
Staff Information  
Finance  
Shared Services  
Human Resources  
Occupational Health & Safety  
Cultural Diversity  
Education - ILC  
Library  
Infrastructure  
IT&T  
Brochure Templates  
Policies & Procedures

Start downloading from site: <http://info.wh.org.au/default.htm> Local intranet

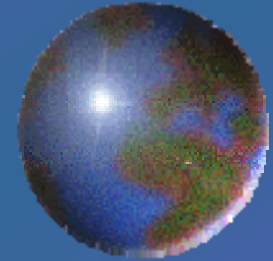
Start H:\PowerPoint Presentati... Microsoft PowerPoint Western Health Intran... 4:23 PM



# Internet access to Web Page

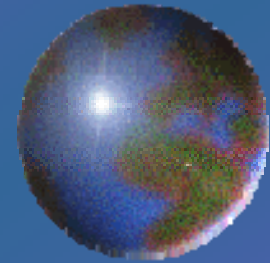


# Western Health after U.S.E.



The screenshot shows the Western Health Library Service website. At the top, there is a navigation bar with 'Home | Login | Support'. Below this is a banner for 'Western Health - Library Service' with a list of hospitals: 'Sunshine Hospital - The Williamstown Hospital - Western Hospital - Hazeldean - Reg Geary - DAS West'. A navigation menu includes 'e-Journals', 'Databases', 'Interactive Learning', 'Policy / Procedures', and 'Useful Links'. A 'Customisable' box points to the banner area. A search box is labeled 'A universal search box'. A 'Login' button is next to 'UserName' and 'Password' fields. A 'Individual profiles' box points to a section that says '(Unified Search Environment). Without their assistance this would not have been possible!'. Below this is a 'Go direct to:' dropdown menu with 'Individual Resources...' selected. A 'User vic013. Logged in.' notification is visible with links for 'Help | Feedback | Exit | Log out'. The main search area has a 'Search:' field and a 'Map:' dropdown set to 'No thesaurus'. A 'Select:' dropdown menu is open, showing options: 'Overview', 'Drugs/Guidelines', 'Textbooks', 'EBM', 'Local', and 'Citations/e-Journals'. A 'Please Note:' section provides instructions on how to use the search. A 'Cross content search' box points to the search area. A 'Local/internal content integrated with search' box points to the 'Please Note:' section. A 'Accessing knowledge is just select & click, or search & click – whether at work or at home...' box points to the search area. On the left, there is a 'Clinicians Health Channel' sidebar with a list of resources including 'A to Z of Journals', 'AustHealth & Meditext', 'Australian Medicines Handbook', 'Books@OVID', 'CINAHL', 'Clinical Evidence', 'FullText Clinicians Health Channel', 'Journals@Ovid', 'Harrison's Online', 'Medline', 'MIMS', 'Micromedex', 'Paediatric Pharmacopoeia', 'PsycINFO', 'Therapeutic Guidelines', and 'Joanna Briggs Institute'. At the bottom of the sidebar, there is an 'About CHC' section with links for 'About CHC', 'Related Sites', 'Current Health Alerts', and 'Health Conferences'.

# Current Products - Thesaurus Technology & Coding Systems



Home | Login | Support

Western Health  
- Library Service  
Sunshine Hospital - The Williamstown Hospital - Western Hospital - Hazeldean - Reg Geary, - DAS West

:: e-Journals :: Databases :: Interactive Learning :: Policy / Procedures :: Useful Links

USE unified search environment Go direct to: Individual Resources... User vic013. Logged in. Feedback | Exit | Log out

Your query mapped to the synonyms below.

<< Back Continue >>

Original Subject	Synonyms and Related Subjects
abduc*	<ul style="list-style-type: none"><li>Synonyms:</li><li><input checked="" type="checkbox"/> abduc* (search as keyword)</li><li><input checked="" type="checkbox"/> Abducens nucleus</li><li><input checked="" type="checkbox"/> Sixth cranial nerve nucleus</li><li>Abducens nerve nucleus</li><li>Nucleus of abducens nerve (VI)</li><li>Nucleus nervi abducentis</li><li>Abducent nucleus</li></ul>

Search In

- All Fields
- All Fields
- Title
- Body Text
- Limit To Resource
- CITATIONS/JOURNALS/EBM ONLY:
- Author
- Subject
- Focused Subject
- Exploded Subject
- Exploded Focused Subject

If unsure of spelling (eg. "abducens nucleus"), can type in first few letters of term

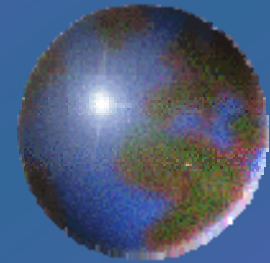
Mapped to one or more synonyms of term

Over 50 different coding systems supported (eg. ICD9, MeSH, DSM4, etc)

Search can be restricted to title, subject or other fields

<< Back Continue >>

# W.H.A.L.E.S - ability to access catalogue, web page, & databases



Unified Search Environment - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address <http://www.use.hcn.com.au/portals/shared/subject.` Medicine` /root.html?U=vic013> Go

Home | Support

**W.H.A.L.E.S.**

Western Health Access - Library Electronic Service

Sunshine Hospital - The Williamstown Hospital - Western Hospital - Hazeldean - Reg Geary, - DAS West

**Library** :: e-Journals :: Databases :: Interactive Learning :: Policy / Procedures :: Useful Links

Library Web Page  
Horizon Library Catalog (external)  
Horizon Library Catalog (internal)

Western Health and the Library Service, wish to thank the **Collier Charitable Trust Fund** for their generous donation towards U.S.E (Unified Search Environment).  
**Without their assistance this would not have been possible!**

Go direct to: Individual Resources... User vic013. Logged in. [Help](#) | [Feedback](#) | [Exit](#) | [Log out](#)

Search: [ ] Map: [No thesaurus] [GO]

Select:  Overview  Drugs/Guidelines  Textbooks  EBM  Local  Citations/e-Journals

Cochrane Library  
 Joanna Briggs Library  
 MDConsult Guidelines  
 PEDro

[Browse Health Occupations Topics](#)

[View USE release notes](#)

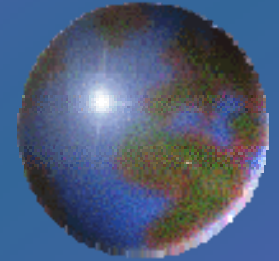
[Turn on USE tutorial mode](#)

**Please Note :**  
If you wish to search through individual databases - use the first box - "Go direct to individual resources"

Internet

Start | H:\PowerPoint Presentati... | Database Training chc.ppt | Database Training.ppt | Unified Search Environ... | 12:31 PM

# Role of U.S.E.

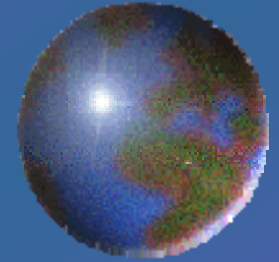


## DOES

- ✓ Make life easier for novice users
- ✓ Provide a consistent user interface for commonly used functions

## DOESN'T

- ✗ Replace advanced search features specific to an individual database

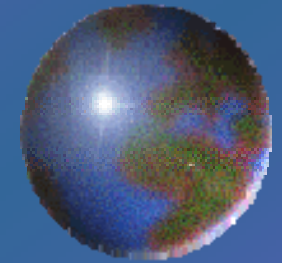


## **Successful conclusion - WH**

- Happy end users
- Saves time locating and searching for information
- Promoted database use by 82% from 40%
- Excellent management tool for e-resources

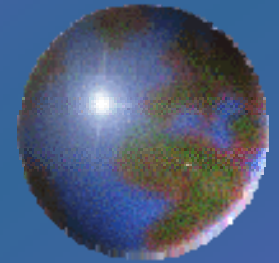


# Project awaiting completion



- EzProxy – IP authentication
- Borrower Surname/Barcode

# Conclusion - Do federated search engines replace librarians?

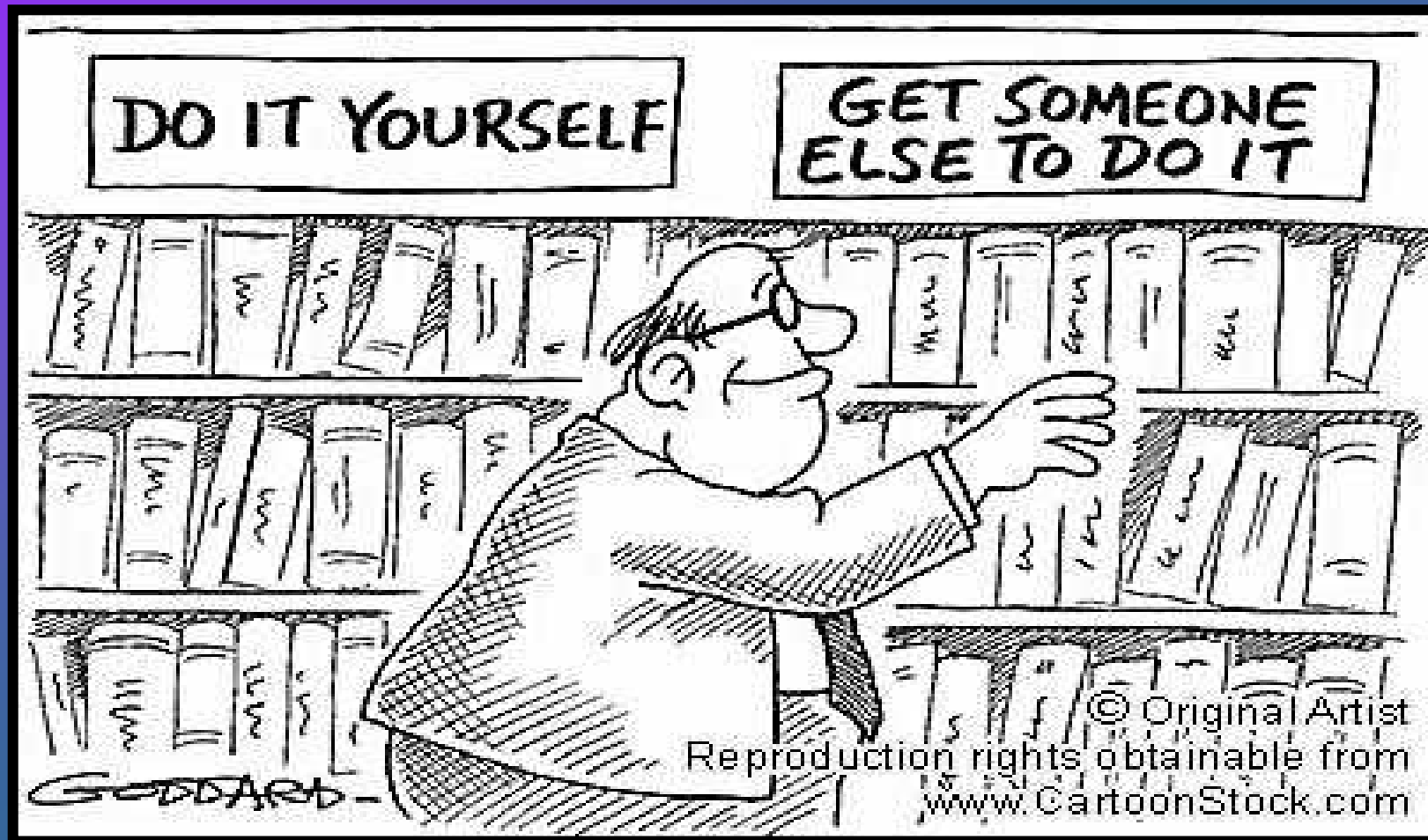
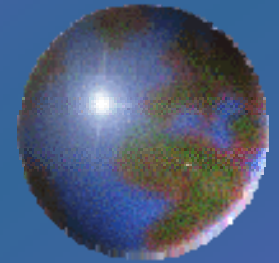


- Librarians are ‘bridges’ between technology & user requirements
- Librarians are trainers
- Librarians are ‘expert’ searchers
- Librarian are content managers

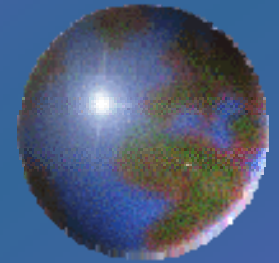
*It's all about the end user!*



# OUR USERS NEED US!



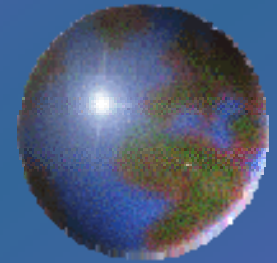
**“If information is the currency of democracy, then libraries are the banks.”** *Senator Wendell Ford*



**Knowledge is**

**POWER!**

# HAPPY FEDERATED SEARCHING!



*“The best way to predict our future is to invent it.”*

*Alan Kay*



[www.smallartworks.ca](http://www.smallartworks.ca)