What's going wrong for our users? Analysing zero result searches to enhance the user experience

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What's going wrong for our users?

Analysing zero result searches to enhance the user experience

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Bond University
Australia’s first private not-for-profit independent university

4,000 students

62% domestic and 38% international

62% undergraduate and 38% postgraduate
What’s going wrong for our users?

- **Scopes**
  - Is it obvious to users what scopes will do?

- **Learning**
  - Do users learn or change their behaviour over time?

- **Search strings**
  - What kind of searches are being conducted?

- **Aiding users**
  - How well does Primo handle zero result searches? E.g. ‘Did you mean’, suggestions, etc.

- **Comparisons**
  - Compare zero result searches to all searches.
  - Compare scopes and pre-filters in zero result searches to all searches.
  - What other searches were conducted during the session?
ZERO RESULT SEARCH ANALYTICS

Attributes from analytics and where they’re found in Primo http://library.bond.edu.au/librarysearch

Simple Search
Contains the Active tab and Search scopes.
Most of my analysis focused on the Search Scopes and Active Tabs

Advanced Search
Contains the Field searched, Search type and the Resource type pre-filter
8% used Field Search, 5% used Resource type pre-filter, 2% used Search type (other than keyword default)
ANALYSIS STRATEGY

DATA
Zero result searches from Semester 1, 2016.

CODING
Assigned ‘Type of Search’ to each search, e.g. Known item search or exploratory search.

ANALYSIS
Analysed search strings in attribute groupings and compared results across the whole semester.

REPLICATE
Attempted to replicate some searches to acquire complete experience.
Comparing the % of zero result searches for Type of Searches.

- **Known item search**
- **Exploratory search**
- **Database title search**

**Weeks 1 - 4**
- Known item search: 51%
- Exploratory search: 44%
- Database title search: 5%

**Weeks 10 - 13**
- Known item search: 43%
- Exploratory search: 55%
- Database title search: 2%
Total zero result searches from weeks 1-13

SEARCH SCOPES

- All resources
- A-Z Journals list & Journals scope
- Course Resources
- Main & Law Libraries
- Other
• SEARCH SCOPES •

Analysis of the use of search scopes for zero result searches

- Incorrect use of phrase use, e.g. "Soil Classification can impact vegetation" or "social media and poker"
- Misspelt and mistyped database title searches
- Approx 300 exploratory searches without any filters or other scopes used – mistyped or spelt. Natural language, e.g. Literature review on ikea future, nature based tourism in 1920s 1930s

ALL RESOURCES

60%
SEARCH SCOPES

Analysis of the use of search scopes for zero result searches

COURSE RESOURCES
- Searchable fields
- Incorrect use of scope
- Mistyping and incorrect spelling
- Database title searches

MAIN & LAW LIBRARIES
- Incorrect use of scope
- Natural language searches

12%

6%
Most searches weren’t for journal titles.

Many exploratory searches and a few article citations. Lots of database title searches.

Towards end of semester journal title searches increased and database title searches decreased.

No suggestions for zero result searches in the A-Z Journals list.
Ideas for improving the user experience

**Scopes**
Reconsider drop-down scope menu to potentially remove and replace with new filters as appropriate.

**Searchable fields**
Check fields you think are searchable are searchable.

**Databases**
Remove hurdles to access. Add common misspelling/similar spelling as alternate titles. Investigate boosting in results.

**A-Z Journals list**

**Natural language searches**
Develop further support for natural language searches.

**Assistance at time of need**
Thanks For Listening