INTERPRETING STUDENT SEARCHES: ENRICHING LIBRARY OUTREACH THROUGH SEARCH QUERY ANALYSIS

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BACKGROUND
Bloomington
- Doctoral/Research Extensive
- FTE 41,737 (Fall 2016)
- Flagship IU campus

Kokomo
- Baccalaureate General
- FTE 2,727 (Fall 2016)
- Nursing, Business, Health Sciences
IUCAT (shared catalog)

IUB:
• Launched OneSearch@IU Aug 2011

IUK:
• Launched EDS Sep 2011
METHODOLOGY
Query set

- Fall 2015 census

Random sample

- 1,677 queries each

Categorize

- Library of Congress Classification schedule
Did not categorize:

- Databases
- Journal titles
- Source types
Did categorize:

- Article titles
- Known titles
- Keywords
Identifying classes
### Identifying classes

<table>
<thead>
<tr>
<th>Call Number</th>
<th>A - General Works</th>
<th>B - Philosophy, Psychology, Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Call Number</th>
<th>C - Historical Sciences (Archaeology, Genealogy)</th>
<th>D - World History</th>
<th>E - History of Americas (General)</th>
<th>F - History of Americas (Local)</th>
<th>G - Geography, Anthropology, Recreation</th>
<th>Government Documents (SuDocs)</th>
<th>H - Social Sciences</th>
<th>K - Law</th>
<th>more »</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>9</td>
<td>11</td>
<td>10</td>
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<td>1</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Publication Year</th>
<th>Library</th>
<th>Collection</th>
</tr>
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<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Publication Year</th>
<th>Language</th>
<th>Format</th>
<th>Copies At</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

1. **Vampires, burial, and death: folklore and reality**
   - Author: Barber, Paul, 1941-
   - Publication Date: 1996
   - Language: English
   - Format: Book
   - Copies At: Indianapolis

2. **Death: an anthology of ancient texts, songs, prayers, and stories**
   - Publication Date: 1994
   - Language: English
   - Format: Book
   - Copies At: Bloomington

3. **Latvian folklore ceļšies bālespils**
   - Publication Date: 1996
   - Language: Latvian
   - Format: Musical Recording
   - Copies At: Bloomington Archives of Traditional Music

4. **Psyche and death: death-demons in folklore, myths, and modern dreams**
   - Author: Herzog, Edgar
   - Publication Date: 1997
   - Language: English
   - Format: Book
   - Copies At: Bloomington
### Identifying classes

#### Publication Year
- 1976
- 1983
- 1937
- 1909

#### Author
- Coffin, Margaret
- Anyidoho, Kofi

#### Language
- English

#### Format
- Book

#### Copies At
- Kokomo, Bloomington
- Bloomington
- South Bend
- Kokomo, Fort Wayne, Indianapolis, Bloomington

#### Dewey Classification
- A - General Works
- Dewey Classification
- F - History of Americas (Local)
- G - Geography, Anthropology, Recreation
- GR: Folklore
- GT: Manners & customs
- AC: Collections Works
- GN: Anthropology
- GV: Recreation, Leisure
- Other
- P - Language & Literature

#### Call Number
- 85

#### Subject

#### Campus

#### Library

#### Collection

RESULTS

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LC Classification Totals

<table>
<thead>
<tr>
<th>Category</th>
<th>IU Bloomington</th>
<th>IU Kokomo</th>
</tr>
</thead>
<tbody>
<tr>
<td>H - Social Sciences</td>
<td>473</td>
<td>422</td>
</tr>
<tr>
<td>P - Language &amp; Literature</td>
<td>223</td>
<td>420</td>
</tr>
<tr>
<td>L - Education</td>
<td>187</td>
<td>125</td>
</tr>
<tr>
<td>Q - Science</td>
<td>124</td>
<td>173</td>
</tr>
<tr>
<td>G - Geography, Anthropology,...</td>
<td>112</td>
<td>85</td>
</tr>
<tr>
<td>B - Philosophy, Psychology, Religion</td>
<td>112</td>
<td>115</td>
</tr>
<tr>
<td>T - Technology</td>
<td>107</td>
<td>94</td>
</tr>
<tr>
<td>Database</td>
<td>52</td>
<td>85</td>
</tr>
<tr>
<td>J - Political Science</td>
<td>47</td>
<td>40</td>
</tr>
<tr>
<td>D - World History</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>S - Agriculture</td>
<td>21</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>33</td>
</tr>
</tbody>
</table>
H Class Visualization

- Subclass HA - Statistics
- Subclass HB - Economic theory. Demography
- Subclass HX - Socialism. Communism. Anarchism
- Subclass HN - Social history and conditions. Social problems. Social reform
- Subclass HT - Communities. Classes. Races
- Subclass HM - Sociology (General)
- Subclass HE - Transportation and communications

- Subclass HD - Industries. Land use. Labor
- Subclass HJ - Public finance
- Subclass HF - Commerce
- Subclass H - Social sciences (General)
- Subclass HG - Finance
- Subclass HC - Economic history and conditions
- Subclass HS - Societies: secret, benevolent, etc.
R Class Visualization

Subclass R - Medicine (General)
  - Subclass RT - Nursing
  - Subclass RC - Internal medicine
  - Subclass RD - Surgery
  - Subclass RK - Dentistry

Subclass RG - Gynecology and Obstetrics
  - Subclass RM - Therapeutics. Pharmacology
  - Subclass RL - Dermatology
  - Subclass RE - Ophthalmology
  - Subclass RS - Pharmacy and materia medica
  - Subclass RJ - Pediatrics

Subclass RA - Public aspects of medicine

Medicine
Top 10 Search Terms

- Education: 73% IU Bloomington, 21% IU Kokomo
- Social: 71% IU Bloomington, 28% IU Kokomo
- College: 43% IU Bloomington, 24% IU Kokomo
- Health: 41% IU Bloomington, 24% IU Kokomo
- American: 33% IU Bloomington, 27% IU Kokomo
- Children: 35% IU Bloomington, 30% IU Kokomo
- Women: 30% IU Bloomington, 33% IU Kokomo
- United States: 35% IU Bloomington, 21% IU Kokomo
- Education Social College Health American Children Women United States Effects

Legend:
- IU Bloomington
- IU Kokomo
Basic vs. Advanced Searches

- **Basic Search**
  - IU Bloomington: 968
  - IU Kokomo: 1385

- **Advanced Search**
  - IU Bloomington: 678
  - IU Kokomo: 228

- **Advanced Search + Field Code**
  - IU Bloomington: 709
  - IU Kokomo: 292
Field Codes

- TX – All Text
- AU – Author
- TI – Title
- SU – Subject Terms
- SO – Source
- AB – Abstract
- IS – ISSN
- IB – ISBN
- *JN – Journal Name
- *DE – Subject

*These field codes are not included in the dropdown options for EDS and so indicate that the search was most likely performed by a librarian as you would have to know the code and its definition.
Typographical Errors

Questions

*Includes: Can, Does, Should, When, Which, Who
RECOMMENDATIONS
FOR INFORMATION
LITERACY
## Popular Queries

<table>
<thead>
<tr>
<th>Bloomington</th>
<th>Kokomo</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pillbugs (Isopods)</strong></td>
<td>(pillbug AND behavior) (isopods AND response)</td>
</tr>
<tr>
<td></td>
<td>19 searches</td>
</tr>
<tr>
<td><strong>Folklore</strong></td>
<td>(folklore) AND (comics)</td>
</tr>
<tr>
<td></td>
<td>24 searches</td>
</tr>
<tr>
<td><strong>Their Eyes Were Watching God</strong></td>
<td>(“their eyes were watching god” AND mcgowan”)</td>
</tr>
<tr>
<td></td>
<td>19 searches</td>
</tr>
<tr>
<td><strong>Psychology myths</strong></td>
<td>(10% AND “of” AND our AND brains)</td>
</tr>
<tr>
<td></td>
<td>21 searches</td>
</tr>
<tr>
<td><strong>Espionage</strong></td>
<td>(war AND Spies) (espionage AND cases)</td>
</tr>
<tr>
<td></td>
<td>24 searches</td>
</tr>
<tr>
<td><strong>Feminism</strong></td>
<td>(feminism AND fairy AND tale AND social AND norm)</td>
</tr>
<tr>
<td></td>
<td>19 searches</td>
</tr>
<tr>
<td><strong>James Bond</strong></td>
<td>(007 AND british AND empire)</td>
</tr>
<tr>
<td></td>
<td>20 searches</td>
</tr>
<tr>
<td><strong>Types of intelligence</strong></td>
<td>multiple intelligence</td>
</tr>
<tr>
<td></td>
<td>16 searches</td>
</tr>
</tbody>
</table>
(Un)expected Benefits

- Learn LC
- Discover curricular themes
- Reference desk advantages
- Find issues to fix in catalog
- Use more catalog functions
- New collaboration opportunities with faculty
# Some Considerations...

## Problems with the catalog:

- E-books lack call numbers.
- Some also lack subject headings.

## Questions:

- How do users browse by subject area?
- How do users apply facets that rely upon call numbers?

## Solutions:

- Implications for MARC record suppliers
- Catalog drawbacks = discovery assets?
## System Enhancements

<table>
<thead>
<tr>
<th>EDS</th>
<th>IUCAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Citation Search</td>
<td>- Update Indexes</td>
</tr>
<tr>
<td>- Autocorrect</td>
<td>- Search results</td>
</tr>
<tr>
<td>- Placards</td>
<td>- Facets</td>
</tr>
<tr>
<td>- Expand Did-You-Mean</td>
<td></td>
</tr>
</tbody>
</table>
Future Plans

- Discuss findings with teaching faculty/librarians
- Repeat with spring semester data
- Future studies
- Discuss results with other public service points
Plan 1: Outreach to instructors

- Discuss findings with teaching faculty/librarians
- Repeat with spring semester data
- Future studies
- Discuss results with other public service points
Plan 2: Analyze spring data

- Discuss findings with teaching faculty/librarians
- Repeat with spring semester data
- Future studies
- Discuss results with other public service points
Plan 3: Derivative & partner projects

- Discuss findings with teaching faculty/librarians
- Repeat with spring semester data
- Future studies
- Discuss results with other public service points
Plan 4: Additional library outreach

- Discuss findings with teaching faculty/librarians
- Repeat with spring semester data
- Future studies
- Discuss results with other public service points
Questions?