CONNECTING THE SILOS

Systematic data collection for library and collections assessment
DEFINITIONS
Assessment

- "the action or instance of making a judgment about something"
  - (Merriam-Webster, but emphasis added).
Library Assessment

- **making a judgment** of how well library services are *meeting the needs* of the community it serves

- Growth since 1990’s
  - *Library Assessment Conference*
  - *EBLIP*
  - *Northumbrian Conference*
Focus on the *judgment* of meeting the community's needs *through its collections*.

Older than Library Assessment
- 1970’s – *U Pittsburgh Study*
- 1980’s – *Nat’l Shelf List Count*
- 1990’s - *Conspectus*
Purposes of Collection Assessment

Initially, to tout the size of library

Large number of holdings unused

Collection development shifted from Just-In-Case to Just-In-Time

Shift to assessment of meeting needs
# Collection Assessment Methods

Adapted from Johnson, 2009.

<table>
<thead>
<tr>
<th></th>
<th>Resource-Based</th>
<th>User-Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative</td>
<td>Descriptive statistics of holdings, acquisitions, expenditures</td>
<td>Descriptive statistics of users, usage (circulation and e-resource usage)</td>
</tr>
<tr>
<td>Qualitative</td>
<td>List-checking, peer comparisons, Brief Tests of Collection Strength</td>
<td>Interlibrary loan requests, evaluation surveys, critical-incident assessments of unmet needs</td>
</tr>
</tbody>
</table>
Collection Measures

Absolute
- **Examples**
  - 2.5M titles
  - 365,385 checkouts
- Lack meaning
- No comparison

Relative
- **Examples**
  - Increased holdings 2.5% last year
  - Titles in history were 1.23% of all checkouts
- Provide context
- Comparisons...but compared to what?
COLLECTIONS DATA MANAGEMENT
Institutional Data: Needs

Enrollment
- By department or college or school or program
- By student group
- By semester or year

Faculty
- By department, college or school
- By rank or level
- By year

Programs
- Subjects
- Courses
- Levels of degrees awarded

Degrees awarded
- By program
- By level
Collections Data: Access and Need

Holdings
- By various facets, including:
  - Subject
  - Format
  - Publication Year
  - Year of acquisition
- Sources of data
  - Integrated Library Systems (ILS)
  - WorldCat

Patrons
- Facets
  - Age or grade groups
  - Department or school
  - Level of study
Collections Data: Usage, Quality, Access

Circulation
- Material facets
- Patron facets

Usage statistics
- E-resources
- COUNTER and non-COUNTER

Interlibrary Loan Requests (ILL)
- By subject or publication year
- By patron groupings

Demand-Driven Acquisitions
- By subject
- By acquisition (Discovery, Loaned, Purchased)
- By transactions
CONSPECTUS

1: a usually brief survey or summary (as of an extensive subject) often providing an overall view.

2: outline, synopsis.

Merriam-Webster Dictionary

https://www.merriam-webster.com/dictionary/conspectus
National Shelf List Count

1970's

Initiated by Research Libraries Group (RLG)
- Consortium of large university and very large public libraries

What is the distribution of holdings by subject?

For developing consortial collection development policies
### Conspectus

<table>
<thead>
<tr>
<th>Standard method of assessment of collections</th>
<th>All participating libraries followed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative ratings</td>
<td>“0” = “out of scope” to “5” = “comprehensive collection”</td>
</tr>
<tr>
<td>Detailed list of call number ranges</td>
<td>Dewey Decimal, Library of Congress</td>
</tr>
</tbody>
</table>
Conspectus Ranges – 3 Levels

Division
• Broad subject categories
• 32
• Examples:
  • Art & Architecture
  • Business & Economics
  • Political Science

Categories
• Subsets of divisions
• ~500
• Examples:
  • Sculpture (NB)
  • Statistics (HA)
  • Military Engineering (UG0-620)

Subjects
• Narrow sets of ranges
• ~11,000
• Examples:
  • Mobiles. Sculpture in Relief (NB1272-1280)
  • Theory and Method of Social Science Statistics (HA29-32)
  • Field Engineering (UG360-390)
COLLECTION MAPPING WITH CONSPECTUS
Collection Mapping

Materials grouped by subject, based on classification schema:

- Library of Congress Classification
- Dewey Decimal
- Subject Categories (e.g. JCR)
- Local categories (e.g. ejournals listings)

Evaluating subject-based collections across different dimensions:

- Age of collection
- Usage
- Formats
- Quality (list-checking)
Make Conspectus Relational

Divisions
- DivID
- Description

Attributes:
- PK

Categories
- CatID
- Description
- Call Number Range

Attributes:
- PK

Subjects
- SubjID
- Description
- Call Number Range

Attributes:
- PK

Categories by Division
- CatDivID
- DivID
- CatID

Attributes:
- PK

Subjects by Category
- SubjCatID
- CatID
- SubjID

Attributes:
- PK
### Example of Conspectus

<table>
<thead>
<tr>
<th>Division</th>
<th>Category</th>
<th>Conspectus Subject</th>
<th>Class range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science</td>
<td>International Relations</td>
<td>Conflict and Coercion, War</td>
<td>JZ6360-6405</td>
</tr>
<tr>
<td>Political Science</td>
<td>International Relations</td>
<td>Neutrality</td>
<td>JZ6422-6422.5</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Science, General</td>
<td>Political Science, General</td>
<td>JA0-9999</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Science, General</td>
<td>Periodicals/Societies/Dictionaries</td>
<td>JA1-70</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Theory, Theory of the State</td>
<td>Political Theory, Theory of the State</td>
<td>JC0-9999</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Theory, Theory of the State</td>
<td>Nationalism, Minorities, Geopolitics, Sovereignty</td>
<td>JC311-327</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Theory, Theory of the State</td>
<td>Forms of the State</td>
<td>JC348-497</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Inst. &amp; Public Admin., General</td>
<td>State &amp; the Individual, Civil Rights</td>
<td>JC571-599</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Inst. &amp; Public Admin., General</td>
<td>Political Inst. &amp; Public Admin., General</td>
<td>JF0-9999</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Inst. &amp; Public Admin., General</td>
<td>Comparative Government</td>
<td>JF20-130</td>
</tr>
</tbody>
</table>
Collections

**Library-defined**
- UNT’s collections vs. UTA’s collections

**Based on need**
- Academic Programs
- Research Agendas

**May be broad**
- History
- Mathematics

**May be narrow**
- Aviation Logistics
- Behavioral Analysis
Map Collections to Conspectus

- **Conspectus Subjects**
  - Subject ID
  - Subject Description

- **Collections**
  - Collection ID
  - Collection Name
  - Collection Category

- **Collection Map**
  - Collection Map ID
  - Subject
  - Collection

The diagram shows a relationship between the three tables: Conspectus Subjects, Collections, and Collection Map. The Subject ID from Conspectus Subjects is linked to the Subject ID in the Collection Map, which in turn is linked to the Collection ID in the Collections table.
<table>
<thead>
<tr>
<th>Collection</th>
<th>Division</th>
<th>Category</th>
<th>Conspectus Subject</th>
<th>Class range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>Philosophy &amp; Religion</td>
<td>Religions, Mythology, Rationalism</td>
<td>Africa - Religions</td>
<td>BL2460-2490</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Philosophy &amp; Religion</td>
<td>Religions, Mythology, Rationalism</td>
<td>Africa - Religions</td>
<td>BL2390-2419</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Philosophy &amp; Religion</td>
<td>Religions, Mythology, Rationalism</td>
<td>American Religions - Central America</td>
<td>BL2550-2560</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Philosophy &amp; Religion</td>
<td>Religions, Mythology, Rationalism</td>
<td>American Religions - Mexico</td>
<td>BL2530.M4</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Philosophy &amp; Religion</td>
<td>Religions, Mythology, Rationalism</td>
<td>American Religions - US &amp; Mexico</td>
<td>BL2525-2530</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Philosophy &amp; Religion</td>
<td>Religions, Mythology, Rationalism</td>
<td>Ancient Egyptian Religions</td>
<td>BL2420-2455</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Anthropology</td>
<td>Anthropology, General</td>
<td>Anthropology, General</td>
<td>GN0-298</td>
</tr>
<tr>
<td>Anthropology</td>
<td>History &amp; Auxiliary Sciences</td>
<td>Archaeology, General</td>
<td>Archaeology, General</td>
<td>CC1-960</td>
</tr>
<tr>
<td>Anthropology</td>
<td>History &amp; Auxiliary Sciences</td>
<td>Archaeology, General</td>
<td>Archaeology, General Works</td>
<td>CC1-125</td>
</tr>
<tr>
<td>Collection</td>
<td>Division</td>
<td>Category</td>
<td>Conspectus Subject</td>
<td>Class range</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------</td>
<td>------------</td>
<td>---------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Business &amp; Economics</td>
<td>Statistics</td>
<td>Theory and Method of Social Science Statistics</td>
<td>HA29-32</td>
</tr>
<tr>
<td>Behavioral Analysis</td>
<td>Business &amp; Economics</td>
<td>Statistics</td>
<td>Theory and Method of Social Science Statistics</td>
<td>HA29-32</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>Business &amp; Economics</td>
<td>Statistics</td>
<td>Theory and Method of Social Science Statistics</td>
<td>HA29-32</td>
</tr>
<tr>
<td>Psychology</td>
<td>Business &amp; Economics</td>
<td>Statistics</td>
<td>Theory and Method of Social Science Statistics</td>
<td>HA29-32</td>
</tr>
<tr>
<td>Sociology</td>
<td>Business &amp; Economics</td>
<td>Statistics</td>
<td>Theory and Method of Social Science Statistics</td>
<td>HA29-32</td>
</tr>
<tr>
<td>Teacher Education &amp; Administration</td>
<td>Business &amp; Economics</td>
<td>Statistics</td>
<td>Theory and Method of Social Science Statistics</td>
<td>HA29-32</td>
</tr>
<tr>
<td>Counseling</td>
<td>Business &amp; Economics</td>
<td>Statistics</td>
<td>Theory and Method of Social Science Statistics</td>
<td>HA29-32</td>
</tr>
<tr>
<td>Consumer Experience</td>
<td>Business &amp; Economics</td>
<td>Statistics</td>
<td>Theory and Method of Social Science Statistics</td>
<td>HA29-32</td>
</tr>
</tbody>
</table>
Connecting Items to Collections via the Conspectus
Items

Books
- Print
- E-Books
- DDA

Journals
- Print
- Ejournals

Media
- Physical
- Streaming

Other
- JCR Lists
Only Requirement: Must have subject classification

<table>
<thead>
<tr>
<th>Classification number</th>
<th>Subject categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dewey Decimal</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Library of Congress</td>
<td>JCR</td>
</tr>
<tr>
<td></td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td>Ejournals list</td>
</tr>
</tbody>
</table>
Items Mapped to Collections via Conspectus

Indirect Relationship:

Item -> Subject -> Collection

Item record is assigned Subject based on Item's call number falling within the Subject's call number range.
Demand-Driven Acquisitions Data

- **Conspectus Subjects**
  - Subject ID
  - Subject Description

- **Collections**
  - Collection ID
  - Collection Name
  - Collection Category

- **Collection Map**
  - Collection Map ID
  - Subject
  - Collection

- **DDA Titles**
  - DDA_ID
  - Title
  - Call Number
  - Conspectus Subject
FUTURE VISION

Collections Data Repository
Collections Data Repository

- Mapping measures of...
  - Need
  - Usage
  - Access
  - Quality

...to Collections
Future Plans

- SQL Server Database
- Tableau dashboards
- Integration with university outcomes data
Using relative measures

- Which collections have greater (or lesser)
  - Need
  - Usage
  - Access
  - Quality
Questions?

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