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Pulling It All Together: Developing an Assessment Toolkit

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Session Outline

- Introduction and Background
- Good Practices
- ‘Tools’ for the Toolkit
- Analyzing the Data
- Presenting the Data
- Promoting Assessment
- Questions?
- Bibliography

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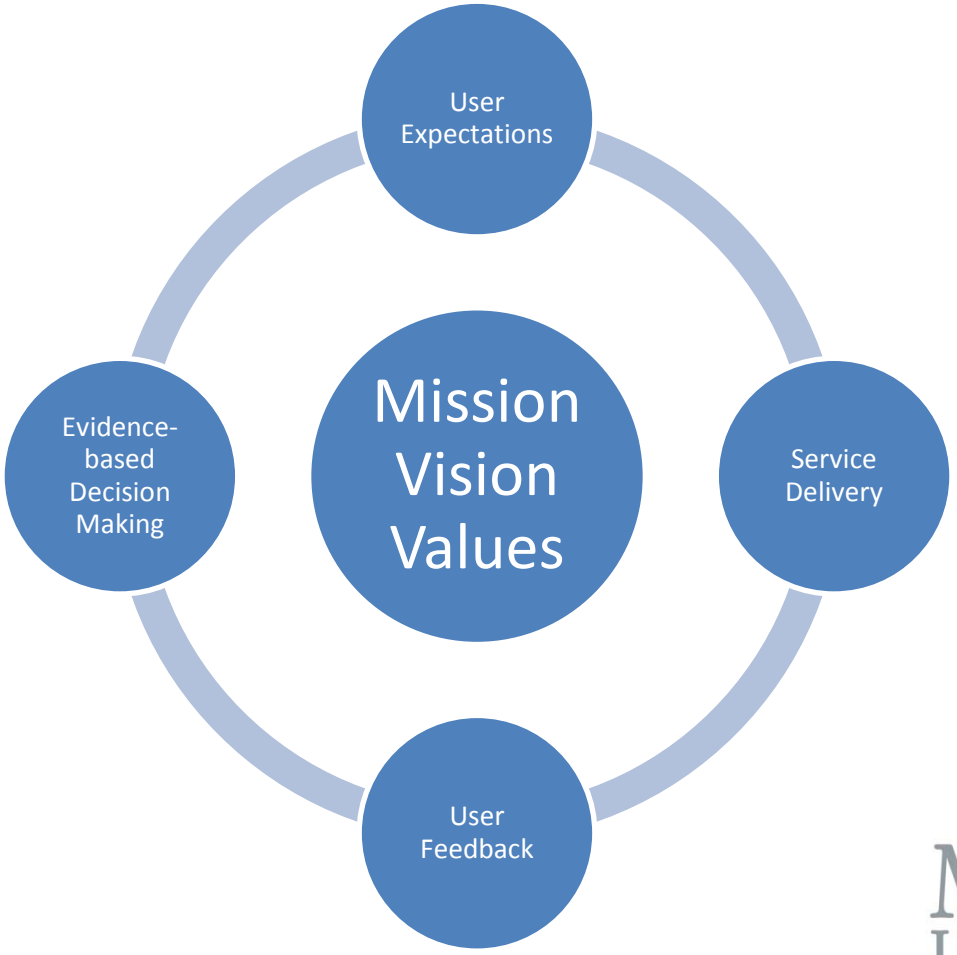
Culture of Assessment



Traditionally, librarians have relied on instincts and experience to make decisions. Alternatively, a library can embrace a “culture of assessment” in which decisions are based on facts, research and analysis. Others have called a culture of assessment a “culture of evidence” or a “culture of curiosity”.

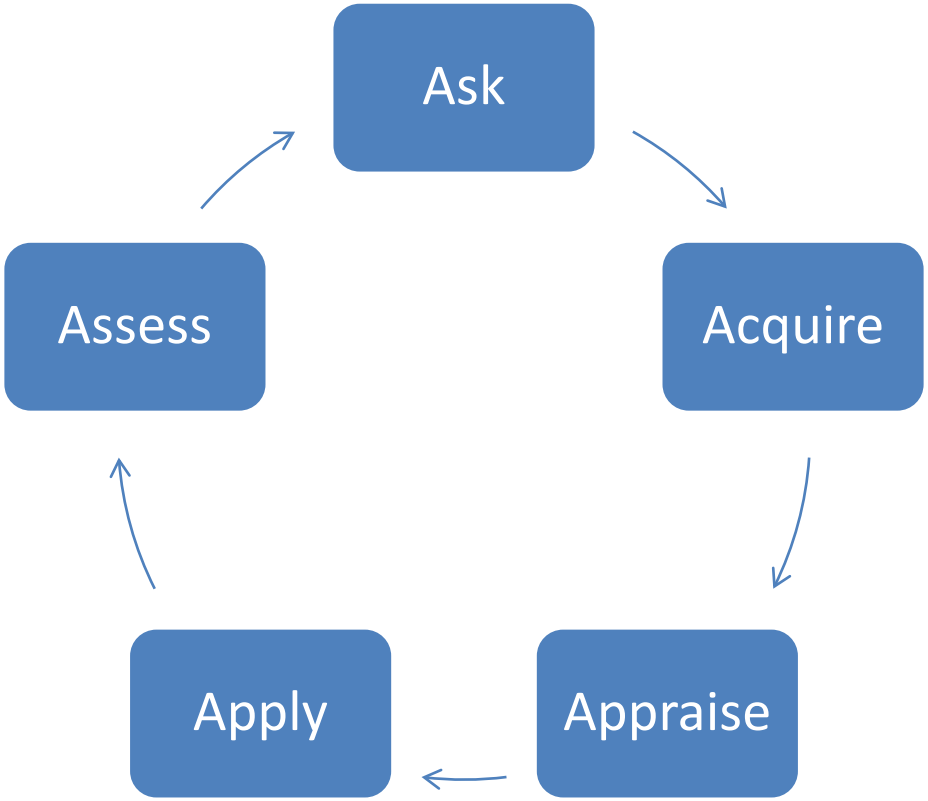
Matthews, ***Library Assessment in Higher Education***, 2007

So, why don't we do more assessment?

Perhaps part of the answer can be attributed to a fairly common perception that doing assessment requires a certain level of expertise in assessment methodologies and data analysis.

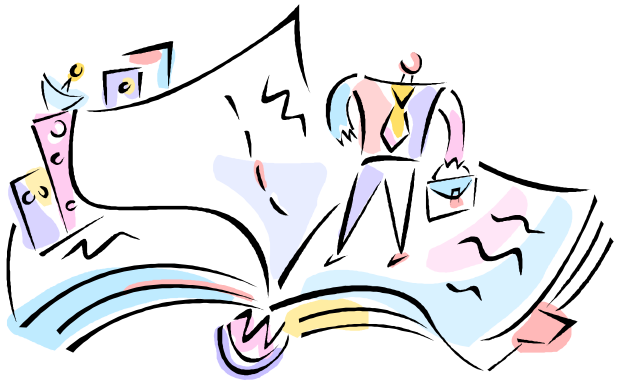
Gratch Lindauer, ***Reference and User Services Quarterly***, 2004

Good Practices: Evidence-Based Librarianship



Good Practices: Project Management

- Scope
- Objective
- Audience
- Decision makers
- Information needs
- Work breakdown structure
- Timeline



Good Practices: Research Ethics Board Approval

- Research Ethics Board
- *Tri-Council Policy Statement (TCPS)* criteria
- Grey areas in *TCPS* Article 1.1
- Informed Consent
- Build good relationship with your Ethics Office

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Tools for the Toolkit

- Quantitative vs Qualitative methodologies
- Surveys and Questionnaires
- Focus Groups
- Interviews
- Observation
- Data Analysis
- Presenting the data

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Quantitative Research

- Numerical, quantifiable, “how many?”
- Useful for determining the extent of a phenomenon
- Implies a statistical rigor
  - Sampling
  - Statistically significant results
  - Generalizable to the population

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Qualitative Research

- Opinions, impressions, “how” & “why” something is happening
- Useful as a diagnostic tool and for developing solutions
- Validates, explains quantitative data

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Words, especially organized into incidents or stories, have a concrete, vivid, meaningful flavor that often proves far more convincing to a reader – another researcher, a policy maker, a practitioner – than pages of summarized numbers.

Miles and Huberman ,***Qualitative Data Analysis: An expanded sourcebook,*** 1994

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Surveys or Questionnaires

- Most commonly used data collection method
- Apparently simple yet complex
- Qualitative?
  - Open ended questions
  - Comment boxes
- Quantitative?
  - Structured questions
  - Representative sample

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Survey Development

- Be clear about what you want to find out
- Be clear about population to be surveyed
- Do you have any useful existing data?
- Self-completed or interviewer administered?
- Decide on distribution method
  - Web, email, paper, telephone, in-person
- Incentive?

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Survey Questions

- Use simple words
  - Computer peripherals vs projector, power cable
- Be specific
  - Circulation policies vs loan periods for laptops
- Avoid double-barrelled questions
  - How would you rate the number and condition of the laptops available for loan?

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Survey Questions

- Avoid leading questions
  - How satisfied are you with ... vs Please rate your level of satisfaction with ...
- Avoid ambiguous questions
  - Do you have a computer at home? vs Do you have a computer in your current place of residence?
- Consider possible motivations for responses
  - To impress, to please, to be polite

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Survey Design

- Clearly identify the library or department; provide a contact name
- Explain the purpose of the survey
- Provide clear instructions
- Arrange questions in a logical order
- Provide a comment box
- Say Thank you!

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Survey Design

- SurveyMonkey
- Zoomerang
- Pre-designed survey instruments
  - LibQUAL+™
  - Counting Opinions LibSAT

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Focus Groups

- Less resource-intensive than surveys
- 6 – 10 people with common characteristics e.g. undergrad students, seniors, satisfied users
- Clearly defined topics of discussion led by a moderator

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Focus Groups

- Good for exploring perceptions, feelings, ideas, motivation
- Help to probe findings from surveys; develop solutions; determine priorities
- Not good for emotionally charged issues or when confidentiality is a concern
- Will not provide quantitative data

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Running an Effective Focus Group

- Requires an impartial moderator and a recorder
- Clear objectives and agenda for the session
- Comfortable space: conference table, name tags, refreshments, gift
- Recruitment of participants: random sample or open call?

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Running an Effective Focus Group

- Explain the purpose of the session and ground rules e.g. respectful of all ideas, confidentiality
- Clearly present the questions
- Ensure equal participation: “let’s hear a different perspective on this”
- Summarize back : “sounds like you are saying...”
- Thank participants
- Review notes with recorder and include observations

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Interviews

- A one-on-one guided conversation to gather in depth information

- Types of interviews

  Structured: use same questions in same order

  Semi-Structured: use same questions; can use in different order and add follow-up questions

  Unstructured: a topic is explored; can use different questions and follow up questions

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Interview Preparation

- Develop an interview guide
  Follow same principles as set out above for preparing survey questions
- Sample group(s): who, how many, recruitment
- Logistics: inviting participants, arranging interviews, reminders. Audio/video record? Note taker?

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Interview Process

Before you begin an interview:

- Ask interviewee's permission if you would like to audio-record or video-record interview
- If REB approval is needed, provide interviewee with information, e.g., the purpose, who is leading the study, rights of the interviewee, and have consent form ready for signing

Interview Process

Conducting an interview

- Start with warm up questions
- Move on to the questions in your interview guide
- For semi-structured and unstructured interviews use follow up questions to clarify

  Allow time for the interviewee to respond – do not be too hasty to fill up silence

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Interview Process

- Most importantly: *listen more and talk less*
- Do not talk over top of the interviewee
- Do not offer your own opinion
- Be aware of your bias: do not ask leading questions, do not anticipate answers
- At the end of the interview, say “Thank you”

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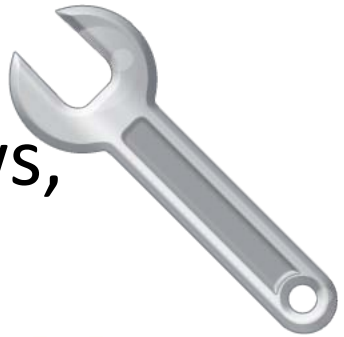
Observational Methods

Observational methods help us to see what is actually happening in a setting. Observations can be broadly categorized as two types:

- Descriptive (quantitative):
  use a checklist to record what you are seeing
- Exploratory (qualitative):
  ethnographic approach uses interviews, videos, photographs, etc.



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Observation Steps

- Select site
- Choose sample group – who will be included?
- Decide how often observations will be conducted. Over what period of time?
- Prepare an observation protocol to record information and notes
- Pre-test the protocol

Observation Steps

- Record other pertinent information, e.g. events that have an impact on what you are observing, and whether your appearance is influencing behaviour and how
- Be aware of your bias to avoid seeing what you expect or want to see rather than what is naturally occurring

Analysis of Results

- The approach will depend on the data (quantitative or qualitative?) and the purpose for which the data were gathered
- Three basic steps:
  - Data reduction
  - Data display
  - Drawing conclusions

» Miles and Huberman, ***Qualitative Data Analysis: An expanded sourcebook***, 1994

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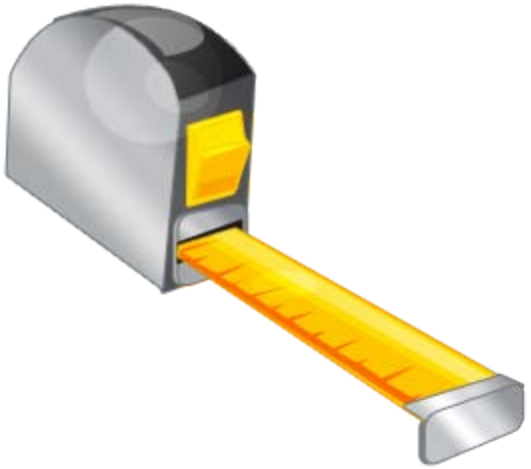
Statistical Analysis

- Sample size, random sample
- Mean, median, mode
- Standard deviation
- Probability
- Tests of significance
- Confidence intervals
- Correlation



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Statistical Analysis: Developing your skills

- Web sites for sample size
- Introduction to statistics courses
- Statistics books for non-mathematicians
- Excel, SPSS
- Seek help: colleagues, faculty members, other units on campus e.g. Institutional Research
- Recognize your own limitations

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Qualitative Data Analysis

- No less daunting than quantitative data analysis
- Familiarize yourself with the data (read and re-read)
- Code and categorize
- Identify major themes
- Identify different points of view

Qualitative Data Analysis

- Software for content analysis
  - NVivo
  - Atlas.ti
- Manually
  - Cards, Post-it notes, coloured markers on a printout
- Database management system e.g. PostgreSQL

Presenting the Data

- Summarize the data
- Present the analysis logically
- Make note of variations and differences
- Provide context by comparisons
  - Over time, between groups, other institutions
- Acknowledge the limitations of the data

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Data can easily be presented to appear to mean rather more than in fact they do.

Brophy, ***Measuring Library Performance: principles and techniques***, 2007

Promotion of Assessment

Assessment is intended to lead to improvements in service as identified by those for whom the service is designed. In order to engage staff and users in the process, all need to see that their time and energy result in positive action.

Promotion is two fold: promote within the libraries among staff and promote with your user community

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Promotion of Assessment

Some Promotion Ideas

- Ask to attend meetings to share information about your assessment project – its importance to support strategic planning in meeting user needs and expectations
- Engage all who should be involved in discussing results and generating ideas for possible actions

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Promotion of Assessment

- Use in-house newsletters, library Web site, blogs, etc. to announce assessment initiatives, share results, provide updates to staff and users on actions taken
- Build rapport with library colleagues who are involved in assessment to share ideas and questions

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Promotion of Assessment

- Host and/or participate in staff development opportunities, e.g. workshops, invited speakers, conferences
- As you gain experience and expertise with assessment, share it with others, e.g. provide in-house training; lead a workshop

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Bibliography

Brophy, Peter. *Measuring Library Performance: Principles and Techniques*. London: Facet Publishing, 2006.

Byrne, Gillian. "A Statistical Primer: Understanding Descriptive and Influential Statistics." *Evidence Based Library and Information Practices* 2 (2007): 32-47.

Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, Social Sciences and Humanities Research Council of Canada. *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans.* 1998 (with 2000, 2002, and 2005 amendments). [http://pre.ethics.gc.ca/eng/policy-politique/tcps-eptc/]

Chrzastowski, Tina. "Assessment 101 for Librarians: A Guidebook." *Science & Technology Libraries* 28 (2008): 155-176.

Eldredge, Jonathan. "Evidence-Based Librarianship: the EBL Process." *Library Hi Tech News* 24 (2006): 341-354.

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Bibliography

Few, Stephen. *Show Me the Numbers: Designing Tables and Graphs to Enlighten*. Oakland, CA: Analytics Press, 2004

Given, Lisa M. and Gloria J. Leckie. "'Sweeping' the Library: Mapping the Social Activity Space of the Public Library." *Library & Information Science Research* 23 (2003): 365-385.

Gorman, G.E. and Peter Clayton. *Qualitative Research for the Information Professional: A Practical Handbook*. 2nd ed. London: Facet Publishing, 2005.

Gratch Lindauer, Bonnie. "The Three Arenas of Information Literacy Assessment." *Reference & User Services Quarterly* 44 (2004): 122-125.

Hernon, Peter and Ellen Altman. *Assessing Service Quality: Satisfying the Expectations of Library Customers*. 2nd ed. Chicago: American Library Association, 2010.

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Bibliography

Matthews, Joseph R. *The Evaluation and Measurement of Library Services.* Westport, Conn.: Libraries Unlimited, 2007.

Matthews, Joseph R. *Library Assessment in Higher Education*. Westport, Conn.: Libraries Unlimited, 2007.

McNamara, Carter. "*Basics of Conducting Focus Groups*." Free Management Library. Authenticity Consulting. 2010. www.managementhelp.org/evaluatn/focusgrp.htm

Miles, Matthew B. and A. Michael Huberman. *Qualitative Data Analysis: An Expanded Sourcebook*. 2nd ed. Thousand Oaks, CA: Sage, 1994.

Mlodinow, Leonard. *The Drunkard's Walk: How Randomness Rules Our Lives*. New York: Pantheon Books, 2008.

Richards, Lyn. *Handling Qualitative Data: A Practical Guide*. London: Sage, 2005.

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Bibliography

Rowntree, Derek. *Statistics without Tears: An Introduction for Non-Mathematicians*. London: Penguin, 1981.

Seidman, Irving. *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences.* New York: Teachers College Press, 2006.

Tavris, Carol and Elliot Aronson. *Mistakes Were Made (But Not by Me): Why We Justify Foolish Beliefs, Bad Decisions, and Hurtful Acts.* Orlando: Harcourt, 2007.

Tufte, Edward. *The Visual Display of Quantitative Information*. 2nd ed. Cheshire, Conn.: Graphics Press, 2001.

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Questions?

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