

Measuring impact and outcome

Roswitha Poll

**Regional and University Library
Münster / Germany**

*Do we make a difference?
The challenge to prove it*



Definitions

input



output



impact

outcome

value

benefit

a contribution of work, information, or material

the amount produced, the results supplied

the effect or influence of one person, thing, or action, on another

the consequence, visible or practical result or effect of an event or activity

the importance or preciousness of something, the perception of actual or potential benefit

a helpful and useful effect that something has

Why should we measure outcome

Accountability

- Limited resources
- Competing priorities
- Results-based budgeting
- Public reporting
- Increasing demand for services

Management of resources

- Planning
- Allocating resources
- Optimizing outcome
- Monitoring effects of change

Promotion of the library's role

- Competing ways of information provision
- Communication of benefits
- Influence on policy makers



The data libraries present today ...

statistics

Input

- Income / expenditure
- Collection size / additions
- Number of staff
- Study places / PC's
- Cataloguing data

Output

- Loans / in-house use
- Reference transactions
- ILL / document delivery
- User training lessons
- Attendances at events / exhibitions

- Amount of services / media / facilities offered
- Amount of use

*Did users benefit?
Usage is not synonymous with value*



The data libraries present ...

performance measures

Input/Use



Collection turnover



Use rate of PC-places

Costs/Use



Cost per loan



Cost per session (on an electronic resource)

Use/ Population



Library visits per capita



Loans per capita

Processes



Book processing speed



Correct shelving



Reference fill rate



Quality of services



Efficiency of services

Benefits?



Outcome of libraries

Different outcomes

"Outcomes affecting"

"Outcomes are changed the library"

"... any on an impact"

positive

negative

direct/immediate

long-term

actual

potential

intended

unexpected

use as

Revill

library users contact with ns." ACRL

'event')

phy



- **Actual users**
- **Potential users**
- **Financing authorities**
- **Politicians**
- **Library staff**
- **The public**



What libraries are meant to effect

- Knowledge
- Information literacy
- Democracy
- Social inclusion
- Local identity
- Lifelong learning
- Individual well-being

Changes in
skills,
behaviour,
knowledge,
attitudes



Outcome of libraries

Short-term

- information gained
- problems solved
- time saved
- information seeking skills improved
- IT skills improved

Long-term

- information literacy
- improved academic success
- better career chances
- changes in behaviour (reading, use of information)

Economic value

- time saved
- effect on the economics of a community / a commercial firm / an institution

Benefits for the future

- information stored / made accessible for use in 100 years



Problems of ,measuring' outcome

- Benefits may vary as to user groups
- Values may be seen differently
- Data are not consistent (differing ways of collection)
- All tested methods are time-consuming
- Influences on users are complex:
Can we trace improvement back to library services?
- We may have to use surrogate measures



Outcome compared to traditional data

Input

collection size

staff at reference desk

resources spent on user training

Output

issues

reference transactions

hours of user training

Performance

collection turnover

reference fill rate

attendances per capita

Outcome

● factual knowledge

● conceptual knowledge

● promotion of academic / pro-fessional success

● information skills

user satisfaction?



User satisfaction

"Satisfaction on the part of a user is an outcome. So is dissatisfaction" ACRL

"Customer satisfaction ... is neither outcome nor output. Rather, it is a qualitative assessment of library outputs." Jennifer Cram

- Previous experience affects the perception
- Loyalty influences the answers
- Users may be satisfied without any tangible benefits

Qualitative performance indicator?



Possible methods to measure outcome

Financial value

Assessing the market value or proxy price of the library's services or a single service

Social impact

Assessing the imputed value of the library by social audits

Information literacy

Assessing the impact of library use and user training on the users' information skills

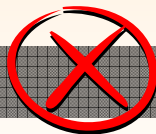
Academic / professional success

Assessing the relation of academic / professional success (duration of studies, examination results, papers published) to the use of library services

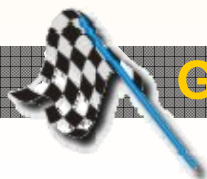


Financial value

- Actual or potential benefits to users quantified in money
- "Proxy prices" (shadow prices) = prices that would be paid for a service the library offers in the market
- Evidence of libraries directly affecting the economics of their institution / community



Not: Costs of a service as determined in a cost analysis



Goal: To show return on investment



Financial value

Replacement value of a client's time

"The value that users place on library services must be at least as great as their sacrifice in accessing and using them".

Glen Holt



Example:

Parliamentary Library New Zealand
"Time costs" were compared with purchase costs of the assets used to provide a service

Result:

Services had a value between two and twenty times the annual budgets



Financial value


Contingent valuation

- **Willingness-to-pay** = What would users be willing to pay for a certain service?
- **Willingness-to-accept** = What sum would users accept as equivalent for giving up a certain library service?



Example: St. Louis Public Library Services

- Market price assessed for each service (as far as possible)
- Telephone survey, focus groups, interviews



Result: WTA: 9 \$ Dollar payback to every 1 \$ in current taxes if I agree to close all libraries

WTP: 1 \$ paid more to every 1 \$ if all libraries are kept open



Financial value

Proxy prices

- What price for a reference transaction done by a commercial firm?
- What prices for lending books / media from commercial suppliers?

Consumer surplus

- Value that users place on the consumption of a service in excess to what they "pay" to get them (time, travelling)

Example: St. Louis Public Library Services got a surplus 3:1

All methods

want to show that libraries do not only create immaterial "value", but that a market value can be proved, and that there is a return on investment.

PROBLEM

Would users indeed pay such a sum?

Interested stakeholders

- Financing authorities
- Public



Social impact

Preciousness of library services

- for the individual (direct benefit)
- for the population (indirect benefit)

Methods

- interviews (e. g. "street surveys")
 - questionnaires
 - telephone surveys
 - focus groups
- connected with questions as to**
- sociodemographic data (age, gender, ethnic origin, income, employment status, academic status)
 - frequency of library use



Social impact

Functions of the library
that were deemed most important:

- children's literacy
- establishing reading habits
- leisure reading
- cultural meeting point
- access to information
- help in finding information
- job and training information

Direct benefit – potential benefit:
Different views of users / non-users



*Subjective assessment
often anecdotal evidence*

**Interested
stakeholders**

- Politicians
- Public
- Management



Information literacy

- Assessing the library's role in conveying information skills and competences

- Assessing the library's actual and potential role for information seeking

Impact of library use and training

- Outcome – based education

- Accreditation models

- Standard (ACRL)

Methods used:

- Surveys after instruction (“reaction data”)

- Assessing the quality of bibliographies / papers

- Self-assessment of users

- Behavioural observation

- Test

- pretests / posttests
- basic skills
- conceptual knowledge (e. g. critical reading)

- Additional data:

- faculty
- term, grade
- frequency of library use

Information literacy

Example of a “mini-quiz”

Students ...

- are aware of options to get material not available locally
- can recognise a Web address, a book citation, a serial citation, and a call number
- know how to use the operators AND and OR
- know the difference between primary and secondary sources
- know the difference between popular and scholarly journals
- think library skills will be useful in their chosen profession.

Information literacy

PROBLEM

User surveys after a training lesson focus on user satisfaction, not on outcome, and might be complimentary

Self-assessment not reliable

- 90 % of students rated their library skills as adequate
- 53 % were "minimally competent"

Danger to rely on attitudes / opinions

Difficulty to trace skills / competences back to the library

Interested stakeholders

- users
- staff
- institution / community

Information literacy

Information seeking behaviour

- New ways of communication
- Information channels outside the library

What part of information seeking and provision is done via libraries?

Where could libraries step in?

What role do they have as to certain subjects / professions? (chemists, psychologists, nurses, teachers)

Information literacy

Example:

**German special collection programme (DFG)
Evaluated from the user perspective**

**5 subjects: English studies, economics, biology,
history, mechanical engineering**

Survey of 5000 academics as to:

- ◆ **information seeking ways**
- ◆ **procuring documents**
- ◆ **problems, expectations**

PROBLEM

Indirect way to prove outcome

Interested stakeholders

- ◆ **Users**
- ◆ **Management**
- ◆ **Institution**
- ◆ **Financing authorities**

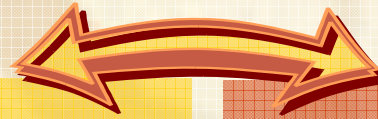
Academic / professional success

Success

- Good exams
- short duration of studies
- Quick employment after finishing education
- Highly reputed publications (citation impact)

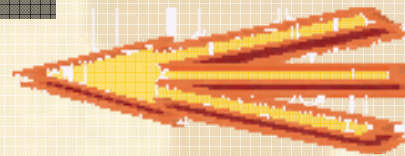
Library use

- Average time per week spent on using the library
- Number of books borrowed
 - core material
 - special material
- Use of reference desk
- Attendance at user training



How to get the data?

Library use



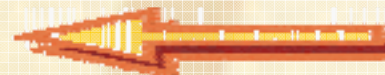
automated system
user diaries
questionnaire, interview

Exams,
duration of studies,
employment level



university records

citation impact



citation index

Academic / professional success

Advantage:

Mostly not relying on attitudes, but on concrete data.

PROBLEM

Data for individual users might be hard to obtain

A positive correlation does not prove that the success is due to the library

Interested stakeholders

- Users
- Institution
- Financing authorities
- Management

Measuring outcome needs users' cooperation

They are asked

- to rate their benefits / failures after the visit / use
- to rank library products and services
- to put a financial value on services
- to rate their own skills and competences
- to participate in tests
- to agree giving private data for evaluation programmes

In addition, data about users are collected

- from the automated system
- from attendance lists
- from institutional records.



The way to go

Definition of mission and goals

What outcome is expected?

Collection of input data

What is provided by the library that can lead to outcome?

Assessment of costs

What means have to be used to achieve outcome?

Collection of output data

What use is made of the services offered?

Assessment of quality

In how far does the performance of the library render outcome possible?

- Large input / good performance may give the basis for high outcome
- Intensity of use seems to indicate realised benefits

Outcome

Is there an impact on people's lives?
Can we prove it?

"The search for an ultimate measure of benefit may be illusory".

Don Revill





MIAOU

Measuring Impact And Outcome on Users

<http://www.uni-muenster.de/ULB/outcome/index.html>

ULB Münster
Universitäts- und
Landesbibliothek

