

# **What does success look like? Evidence-based assessment of the academic library.**

**Dr. J. Eric Davies:** Loughborough University. UK.

## Abstract

This paper will explore, with examples, various aspects of the evidence based approach to performance assessment of the academic library which may be applied to charting the level to which the library is succeeding and to supporting the development and enhancement of services.

The modern academic library manager faces increasing challenges to manage optimally in a rapidly changing environment. It is an environment in which information delivery modes are dynamic, technology dramatically extends service options, user expectations are increasing, and there is greater emphasis on accountability and demonstrating impact. At the same time resources remain generally limited. In this scenario the manager requires refined methods to assess and develop performance.

A framework for performance measurement was postulated by a group in the UK headed by Sir Bryan Follett the Vice-Chancellor of the University of Warwick. They identified the following five key factors:- integration with institutional approach, user satisfaction, effectiveness of delivery, efficiency and economy.

Clearly, success cannot be measured until it is determined how one wishes to succeed. Performance needs to be reviewed in the light of the mission, aims and the strategic direction of the academic library and its parent institution. These relate to the institution's fundamental approach to scholarship, teaching and research.

Two aspects of evidence are identified – performance evidence and research evidence.

Performance evidence relates to the primarily locally derived information that describes the inputs, outputs, outcomes and impacts of the service in both quantitative and qualitative terms. It also encompasses information regarding the value and impact of the service gleaned from users. Refined approaches to gaining user input include the ARL Libqual and Rodski methods. Data regarding the service domain, or the context in which the library is operating is also meaningful.

Research evidence may be characterised as the generally externally sourced intelligence and macro data that informs service design and decisions. Two recent examples of broad based research evidence include the OCLC study - *College students' perceptions of libraries and information resources* and the ACRL *Environmental Scan 2007*. Studies of more specific aspects of service can also provide valuable planning data.

Another aspect of measuring success is comparative benchmarking against data available from library services in other institutions. This can be undertaken at a strategic or operational level. Some consortia, or benchmarking 'clubs' exist to contribute to this activity.

The paper concludes by emphasizing the need for an evidence based culture to permeate an organization so that everyone involved in a service is committed to achieving and demonstrating success.

### **Introduction**

Why should anyone use a library in 2008? There are many compelling reasons for doing so and they derive from the range of services, support and material that libraries provide. However, it is not ourselves that we have to convince, but our users and potential users, as well as our paymasters, both of the extent, and the quality of what is on offer. But, before we are in a position to do so we have to assure ourselves that what we are managing optimally. That is, that we are providing the best possible service at the right time, to the right people and at the right price. This paper explores, with examples, various aspects of the evidence based approach to performance assessment of the academic library which may be applied to charting the level to which the library is succeeding and to supporting the development and enhancement of services.

### **Challenges and Change**

The modern academic library manager faces increasing challenges to manage well in a rapidly changing environment. These changes are many and varied and some are well beyond the scope of the library manager to influence. Others are directly related to the manager's capacity and willingness to innovate. in the light of events. The impetus to anticipate, adapt and innovate is ever present.

Perhaps the greatest change agent is technology and the way that information and communications technologies have woven together to create new opportunities for assembling, delivering and processing knowledge. In turn, this has extended the scope of formal and informal scholarly communication in many different directions. The global 'invisible college' is a reality through e-mail. The ease with which information can be transmitted or 'published' has rendered it even more plentiful. Electronic books and journals extend the scope of both delivery modes and content.

In addition, research data have become far more accessible through networked databases.

People have changed, or at least, the way that they regard libraries, has. The advent of a more 'consumer' oriented culture in everything, including education, has led to heightened expectations and demands from academic library users who are very aware of their contribution, through fees, to the funding of an institution. These users, moreover, belong to a generation that is very familiar with technology and seek state-of-the-art provision. However, they may, perhaps be less sophisticated and efficient in their use of information and may therefore need added support to develop high-level information literacy.

Finally, society, as represented by government, has wrought changes. In a broad context of public finance and taxation, renewed pressure on public agencies to demonstrate accountability and value for money has created a new emphasis on formal performance assessment and reporting regimes.

Library services have necessarily to evolve to accommodate these developments and the widening portfolio of demands that they represent. At the same time the resources available to respond to change, let alone, anticipate and innovate are very limited and every cent has to count. In this scenario the manager requires a range of refined methods to judge whether, and to what extent the service is operating successfully.

### **Success factors**

Clearly, success cannot be measured until it is determined *how* one wishes to succeed and what will signal that success. In short, what does success look like? Performance needs to be reviewed in the light of the mission, vision and values of the academic library and how they are translated into policies, aims and a strategic direction. All these parallel the parent institution's fundamental approach to scholarship, teaching and research; or how it defines success. Elsewhere, I have explored the role and development of missions, visions and values in the library and information service.<sup>1</sup>

An overall view of how success may be measured in the academic library was suggested in a study in the UK in 1993. The basic criteria remain relevant today, although their interpretation may need to be updated. A framework for performance measurement was proposed by a group reviewing libraries in the UK headed by Sir Bryan Follett the Vice-Chancellor of the University of Warwick.<sup>2</sup> They identified the following five key factors:-

- integration with institutional objectives
- user satisfaction
- effectiveness of service delivery
- efficiency and value for money
- economy in use of resources

---

<sup>1</sup> Davies, J. E. Meaningful missions, valid visions and virtuous values: An exploration. (In: Proceedings of the 72nd IFLA General Conference and Council, August 2006, Seoul - *Libraries: Dynamic Engines for the Knowledge and Information Society*. The Hague, IFLA, 2006.)

<http://www.ifla.org/IV/ifla72/papers/133-Davies-en.pdf>

<sup>2</sup> JOINT FUNDING COUNCILS' LIBRARIES REVIEW GROUP. *Report...* Bristol, HEFCE, 1993. (Chairman: Sir Brian Follett)

The proposals also covered assessment by activity groupings, the presentation of performance data and their use in internal library management.

Fifteen years on, although the fundamentals are unchanged, approaches to assessing library performance have evolved. To begin with, the whole matter appears to be taken more seriously by managers; probably as a result of the increasing challenges they face and certainly because of the climate of increased accountability that prevails. In addition, managers have had the opportunity to build up a body of experience and knowledge in the field. Furthermore, methodologies for gathering, analysing and interpreting data have developed and there is an accumulation of data upon which to explore trends in performance. This has enabled a more integrated approach to performance evaluation that combines an array of data and information in what has become the evidence-based approach. The Special Libraries Association has created a succinct and useful definition of evidence based practice:

For special librarians, evidence-based practice refers to consciously and consistently making professional-level decisions that are based on the strongest evidence of what would work best for our clients.<sup>3</sup>

### **The components of evidence-based assessment**

The evidence based approach may be considered as comprising two main components; performance evidence and research evidence.

Performance evidence comprises the systematically gathered, structured and contextualised information relating to local operations and needs. Performance evidence will relate to both services and processes. Primarily locally derived, the information will describe the inputs, outputs, outcomes and impacts of the service in both quantitative and qualitative terms. Inputs describe the resources that are deployed to create and sustain the service. At a basic quantitative level they will include, for example, the number of staff employed and the hours which they are deployed for specific roles, the extent and nature of the collection including the number of items acquired, and the space provided and the study spaces and workstations available. Outputs describe the services which are directly taken up by users. Quantitatively they include, for example, visits to the library, items borrowed and consulted, documents delivered and downloaded, reference questions received and answered as well as information training sessions attendance numbers.

Outcomes are more difficult to assess, particularly quantitatively. They describe what the user gets out of the service in a much broader context. In a general university context, they encompass the advantages and benefits that users derive from the library as learners, researchers and teachers. One outcome for a learner using the library extensively might be more timely preparation [and submission] of term papers which rely on a more extensive range of [cited] sources. The outcome for appropriate use of the library by the researcher might be improved project performance through a deeper understanding of prior knowledge and better problem solving. This might be reflected

---

<sup>3</sup> SPECIAL LIBRARIES ASSOCIATION. Research Committee.

*Putting our knowledge to work: The role of research in special libraries.* Alexandria, Va., USA, S.L.A., 2001.

<http://www.sla.org/content/resources/research/rsrchstatement.cfm>

in speedier project completion rates as well as the range and quality of scholarly output. Another output for the researcher might be a higher success rate in gaining grant support. The outcome for the teacher drawing on the library's services appropriately might relate to more efficient creation of richer learning experiences that employ a wider range of information resources.

More generally, the level of service penetration, or what proportion of the potential user community use the library's services, gives some overall indication of outcomes, as does the level of repeat use of the library. Another general measure of outcomes is the level of user satisfaction with the service, of which more, later.

It becomes clear that gaining an insight into outcomes at this level demands a capacity to go beyond basic numerical data. It can also involve user surveys, systematically assembled anecdotal evidence and case studies.

Impacts describe, at a macro level, the higher order influences that the library service has on the totality of the community or organisation. Impact may be interpreted as: what difference, in the long run, has the service made; and what added value has it created through its presence? In a university context this will relate to the contribution that the service is making to supporting the institution's learning and research endeavour and the broader interests of the institution. Thus, the availability of a rich array of information resources and corresponding support might foster enhanced levels of learning and research performance. Learners might, for instance, achieve consistently high grades, and better course completion rates. There might be an identifiable improvement in the amount and quality of research performed as measured by grants received, projects completed, patents filed and publications of international standing produced. Specific examples where the library might make a significant difference are, through the creation and management of a local institutional archive of open access sources, or through the provision of a library portal to facilitate resource discovery and retrieval. Of course, assessing impact poses many challenges of methodology and interpretation since the causal relationship between the library service and the performance of the people and the activities being served may be very difficult to isolate. Nonetheless, it is important that ways be found to describe the library's contribution if it is to justify its place [and funding] in the institution. Increasingly, the library service is having to prove its worth in terms of tangible impact in order to justify its existence and to reassure those who provide funding.

Performance evidence also encompasses information gleaned from users regarding their perception of the value and impact of the service as well as how, and why they use it. This may be information acquired formally through user surveys, focus groups or open days. In addition, there is value in information gathered informally through, for example, suggestions books and even complaints about the service. Refined approaches to gaining user input have been developed. The ARL Libqual<sup>4</sup> programme represents a multi-faceted approach to assessing quality. It is based upon an extensive questionnaire that compares user expectations to perceived actual performance. It is a sophisticated tool that, used intelligently, enables resources to be targeted to where they will most affect user satisfaction. A similar approach that

---

<sup>4</sup> Association of Research Libraries. *LibQual Homepage*. 2005  
<http://www.libqual.org/>

measures rated importance against assessed performance on a range of variables is applied in the systematic library client surveys of customer satisfaction developed in Australia by the Rodski Survey Research Group, now renamed Insync Surveys.<sup>5</sup>

Business in general is alert to the value of using information about, and from customers [users or clients] to enhance performance as this recent observation on leveraging information in new ways from a study<sup>6</sup> by the Mckinsey Management Consultancy illustrates:-

The amount of information and a manager's ability to use it have increased explosively not only for internal processes but also for the engagement of customers. The more a company knows about them, the better able it is to create offerings they want, to target them with messages that get a response, and to extract the value that an offering gives them. The holy grail of deep customer insight – more granular segmentation, low-cost experimentation, and mass customization – becomes increasingly accessible through technological innovations in data collection and processing in manufacturing.

Data regarding the service domain, that is, the context in which the library operates, offers meaningful support in developing a quality service. This entails creating a 'community profile, or comprehensive overview of the user [and potential user] population in terms of its size, composition and character. In a university library setting this will comprise detailed information regarding staff and students of all kinds, levels and subject disciplines. Staff will include teachers, researchers, administrators and other support staff. Students may be categorised as undergraduates or postgraduates, full-time or part time, campus-based or distance learners. Furthermore, detail on special groups of users and their particular information needs can also be assembled. For example, data on the number of visually impaired people in a university community will enable a library service to plan appropriately in terms of reading aids, environment and system accessibility. [In the United Kingdom, legislation demands that provision be made for the special needs of students with disabilities.] Data on mature students, particularly those returning to learning after a break, may also be helpful in targeting services such as 'refresher' courses in information use. Quite a lot of service domain data should be fairly easy to obtain from existing university records. Some may need to be especially collected from individual users. Considerations of individual privacy may influence the extent to which a detailed community profile can be created.

Another aspect of the service domain represents the information environment in which the user community is operating and for which the library provides a service. Data on the nature of local information need and use as well the way in which it is generated and distributed will provide useful evidence that leads to a better understanding of *how* information need may be fulfilled, and to whom.

---

<sup>5</sup> Insync Surveys. *Homepage*  
<http://www.insyncsurveys.com.au/>

<sup>6</sup> Manyika, James M., Roger P. Roberts and Kara L. Sprague.  
 Eight business technology trends to watch. *McKinsey Quarterly*. (1) 2008. pp.61-71.

Research evidence may be characterised as the intelligence and macro data, drawn from structured investigation, which informs service design and decision making. Research evidence contributes to success in the way it can be applied to widen understanding of service contexts and priorities, or to identify tested examples of methods and systems that work effectively, or to identify the need for, and assess the potential of service changes. The majority of research evidence will originate from external sources. A wealth of relevant published research material originating from academic institutions, university libraries, professional bodies and business organisations is available, and easily accessible. Some recent examples of valuable broad based research evidence include the OCLC study - *College students' perceptions of libraries and information resources*,<sup>7</sup> the ACRL *Environmental Scan 2007*,<sup>8</sup> and the SCOUNL *Top Concerns Survey 2008*.<sup>9</sup> Studies of more specific aspects of service can also provide valuable planning data. Published statistical series, such as those produced by LISU<sup>10</sup> and SCOUNL<sup>11</sup> in the UK, also provide useful planning data.

There is also a growing trend to conduct in-house research. There is much value in detailed analysis of the local working environment provided methodologies are properly applied. Moreover, the wider such investigations are disseminated, the better, in order that knowledge may be shared. In the UK the Library and Information Research Group<sup>12</sup> of CILIP is particularly active in encouraging the practice [and reporting ] of workplace-based research.

Another aspect of applying evidence to measure performance involves comparative benchmarking. This method may be applied in various ways to identify potential strengths and weaknesses in strategies and processes. Data from other organisations, or groups of organisations with a similar character and range of activity can be compared with the one being assessed. Comparative benchmarking can also be applied in-house to assess the performance of different service points and branches in multi site universities, or it may be used to explore performance over time through comparing historical data. In addition, comparative benchmarking can be used to measure against published performance standards and targets where they are available. As a technique, comparative benchmarking has grown in popularity and institutions have become more willing to share data; a vital factor in its success. Benchmarking 'clubs' or consortia have emerged in some areas. An example of collaborative process benchmarking has been published in the LISU Occasional Papers series.<sup>13</sup>

---

<sup>7</sup> OCLC. *College students' perceptions of libraries and information resources*. Dublin, Ohio. OCLC, 2006.  
<http://www.oclc.org/reports/perceptionscollege.htm>

<sup>8</sup> ASSOCIATION of COLLEGE and RESEARCH LIBRARIES. Research Committee.  
*ACRL Environmental Scan 2007*. Chicago, ACRL, 2008.  
[http://www.ala.org/ala/acrl/acrlpubs/whitepapers/Environmental\\_Scan\\_2.pdf](http://www.ala.org/ala/acrl/acrlpubs/whitepapers/Environmental_Scan_2.pdf)

<sup>9</sup> SOCIETY of COLLEGE, NATIONAL and UNIVERSITY LIBRARIES. *SCOUNL Top Concerns Survey 2008*. London, SCOUNL, 2008.

<sup>10</sup> Creaser, C. S. Maynard and S. White. *LISU Annual Library Statistics 2006 featuring Trend Analysis of UK Public & Academic Libraries 1995-2005* Loughborough, LISU, 2006.  
<http://www.lboro.ac.uk/departments/dis/lisu/downloads/als06.pdf>

<sup>11</sup> Creaser, C. Library trends.  
*SCOUNL Focus* (38) 2006 pp.117 - 118

<sup>12</sup> LIRG homepage  
<http://www.cilip.org.uk/specialinterestgroups/bysubject/research>

<sup>13</sup> Creaser, C. (ed.) *As Others See Us: Benchmarking in Practice*. Loughborough, LISU, 2003.

### **Evidence Based Culture and Competences**

If an evidence based approach to assessment and achieving successful performance is to thrive then it needs to involve staff at all levels within an organization, and not simply its leaders. In an evidence based culture, where everyone is committed to the approach, decision making at all levels becomes more soundly based and service development is undertaken more confidently. The relevance and importance of gathering accurate data gathering becomes more meaningful when everyone is aware of its value and involved in its application.

In addition, an important requirement of achieving an evidence based culture is ensuring that the requisite competencies are in place to exploit the approach. This includes knowing: what evidence to gather and when and how to gather it, as well as how to interpret, present and act on that evidence. Elsewhere, I have explored in more detail the personal qualities required to exploit performance evidence in service enhancement and development.<sup>14</sup>

### **What should measuring and achieving success look like in future??**

Though library performance evaluation has come a long way in the last two decades or so there remains scope to explore new methods of assessment. The pressure to manage optimally will not abate and the need to demonstrate the success of the library, and particularly its worth will remain important. Much can be adapted from the techniques and approaches developed by business and public services.

There is room for further exploration of methods such as contingent valuation analysis and economic impact studies which offer insights into the value of a library service to its community. Contingent valuation analysis has its origins in supporting the determination of the value of environmental features to the community. However, it has been used to indicate the value that is placed on a national library.<sup>15</sup> Economic impact has been evaluated for several public library services and it would be appropriate to explore the theme in university libraries.

Some of the newer management techniques also warrant attention in the quest to build ever more successful library services. For example, scenario planning methods which explore a range of alternative strategies for the future offer scope to involve a range of staff and library users in helping determine the shape of the library service of tomorrow. Managers are under constant pressure to do better with less and ideas which improve performance such as Toyota's Lean manufacturing and Motorola's Six Sigma are worthy of exploration. They are already being applied in the health care service sector in the UK.

---

(LISU Occasional Paper No. 33)

<http://www.lboro.ac.uk/departments/dis/lisu/downloads/OP33.pdf>

<sup>14</sup> Davies, J. E. Culture, capability and character in applying evidence to service enhancement and development: An exploration. (In: *Proceedings of the 73rd IFLA World Library and Information Congress, August 2007, Durban – Libraries for the Future: Progress, Development and Partnerships*. The Hague, IFLA, 2007.)  
<http://www.ifla.org/IV/ifla73/papers/154-Davies-en.pdf>

<sup>15</sup> BRITISH LIBRARY. *Measuring our Value*. London, BL, 2003.  
<http://www.bl.uk/pdf/measuring.pdf>



### **Conclusion**

This paper has offered a snapshot of the evidence based management approach to achieving a successful library service. The future of university libraries as centres for enriched scholarly communication is promising. It remains for those who manage them to grasp the opportunities presented with vigour.

©JED 8/2008