From Kaleidoscope to Common Sense

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Abstract
Making real use of statistics to achieve service improvement needs to be part of the basic training of library managers at all levels. This paper will show how Lancashire has embarked on a long-term programme to help staff make effective use of statistics. Lancashire has recently commissioned a joint project with LISU and Resource – the Advisory Council for Museums Archives and Libraries. The paper will describe experience and concerns with statistics in libraries that led Lancashire to embark on this project. It will expose the strengths and weaknesses of some of our current range of statistics and standards in libraries using a kaleidoscope of examples from the author’s experience as a library manager and in his various national roles. This paper will highlight the need to produce a strategic plan if our considerable investment in statistical collection is to lead to real service improvement.

Introduction
In the UK we are operating in the age of Performance Indicators, Best Value, Comprehensive Performance Assessments and the introduction of the new Public Library Standards (DCMS, 2001). There has never been a period of time in the UK library profession that has seen such a concentration on measured performance. This brings with it a Utopia for researchers and statisticians. If that is your business, there is a growing market place in which you can operate.

Library Services have a long history of collecting statistics and data. We can point to a tremendous breadth and depth of current and historical data collected through, for example, the Chartered Institute for Public and Financial Accountancy (CIPFA), Library and Information Statistics Unit (LISU) and the Public Library User Survey (PLUS). We have a number of universities which have high reputations for research into the library world. Loughborough, Sheffield and the University of Central England are three examples. Some would argue that you could never have enough information and data. Others would argue we are overloaded with data.

As we work through this age of Best Value, Performance Indicators and Comprehensive Performance Assessments I would suggest colleagues in other local government disciplines often view us with envy. In the library world we already have in place the range of statistical measures that other sectors have to create. We also have a reputation for having established a range of definitions and methodologies that allows us to gather and compare data to measure our performance. These have been developed over many years. I am equally aware of the criticisms from colleagues within the profession that some of the data we collect are no longer relevant and that some collection methodologies leave much to be desired. We do have at least one active mechanism for such criticism to be considered through the Committee on Public Library Statistics.

There has also been much criticism within the profession that the new public library standards, and the performance indicators by which we are judged nationally, have been too focussed on outputs and inputs instead of outcomes and long term benefits. The criticisms have validity but we need to exercise care in getting the balance between outputs and outcomes. We need to build on
the very strong output base we have got. The Society of Chief Librarians in the UK is pushing hard to develop robust outcome measures that can be used for the continuous improvement of library services across the UK.

The myriad of library statistics, research and data illustrates a rich and colourful kaleidoscope. This complex, colourful and shifting pattern of statistics may give pleasure to the academics and statisticians, but it has no real value unless we develop the culture in the workplace and the skills in our colleagues at all levels to make real use of the components that make up this kaleidoscope.

Has anyone been brave enough to see how much input is required to collect and produce the statistics and evidence we collect and assess this against the benefits that can be shown to have come from this level of input? We can collect all the data and information we like but it becomes totally useless if we do not:

• Organise and present it with a clarity that allows managers to use it
• Create a culture in our organisations that encourages evidence based decision making
• Train our staff at all levels to make effective use of the evidence that already exists
• Provide staff with the skills to identify, collect and use evidence in making decisions and bringing about improvements to library services

The Kaleidoscope

There are core data on issues, visitors, stock, enquiries, requests, inter-library loans, buildings, IT services and many others in the annual statistical returns we all complete. The data have the potential of real value to local managers since they are collected at source at the lowest common denominator, the individual service point. They are enhanced by specialist data such as the Children’s and School Library Service statistics, mobile library statistics, housebound and old peoples homes. Library Services have also been active in collecting user opinions from robust and credible survey methodologies through PLUS that have been developed by the profession and in partnership with the Institute for Public Finance (IPF) the commercial arm of CIPFA. This kaleidoscope of the range of library data and research is well documented in the LISU publication Perspectives of Public Library Use 2 (Bohme and Spiller, 1999).

We do not, however, concentrate enough resources to ensure that staff at all levels in our organisations have the knowledge, skills and abilities to make effective use of statistics and evidence in making decisions about service improvements. Nor do we skill them to look behind the national and other statistics to analyse their credibility and their suitability to use them for comparisons or benchmarking. I am sure the universities churning out the professionals and potential leaders in the future for our profession would argue that statistics and research based information are a core part of the curriculum they offer. This may be true but at a practical level we do not build this into the culture of many organisations as part of the foundation training. My concerns arise from examples I have seen in my own service and in my work as a member of the Committee on Public Library Statistics and the Public Library User Survey Group I chair.

Making value judgements

How do we decide which evidence to use and the correct context for that evidence? Many of the new Public Library Standards (DCMS, 2001) are based on nationally collected statistics and the standards are derived from the top 25% of performances by existing library services. The Standards
have been criticised by colleagues that they are too output based and we need quality outcome measures. Nevertheless, it is generally accepted that they provide a good foundation we can use to build on to achieve outcome measures to complement the good start the current standards have given. We must be prepared to educate staff, members and people who will use these standards and statistics that they have some limitations and need to be used in the proper context. I will take one of the new Public Library Standards (PLS 9) to illustrate this point.

PLS 9 shows the percentage of requests satisfied within 7, 15 and 30 days. This is intended to measure the speed and efficiency of an authority’s request service. Any authority using these figures in isolation to make decisions on their performance is in danger of making ill-informed judgements. These are not comparable statistics. They take no account of the policies for accepting and charging for requests in each authority. Nor do they take into account the range of exemptions from charges for requests. We need to recognise the limitations of some statistics and the basis on which the evidence or data is collected. In our own family group of 16 authorities used by the Audit Commission for comparison purposes we found that

- Basic request charges varied from 60p to £1.00
- Information available from ten of these authorities showed six made a differential charge for requests obtained outside the authority. This varied from a total charge of £1.50 to £4.50
- Some authorities charged for children’s requests
- There was no common pattern of exemptions
- Some had lower charges for self service requests through the on line services available

How then can you compare like with like and use the comparisons made through the implications in PLS 9 that you are performing any better than others? This is before you raise the question of those authorities that do not accept requests for pre publication material and the time the clock starts ticking in the current definition of the standards data collection methodology for this particular standard.

**Lancashire context**

To understand the decision we have taken to embark on a long-term project for evidence-based management decision making, it is necessary to appreciate the size of the library service in Lancashire. It serves a population of 1.1 million through 84 static libraries, 13 mobile libraries, a schools library service for over 450 primary, special and nursery schools, six prison libraries and a host of services for homes for the elderly and housebound readers. We employ 713 staff – about 535 full-time equivalent. The gross expenditure on library services in Lancashire is in the region of £18 million for 2002/03. For administrative purposes we arrange the county into five Divisions for the library service and each Divisional Manager has a devolved financial budget. The smallest Division has 12 libraries and the largest has 23.

**Evidence of need**

**Junior issues**

In glancing through the annual statistical returns this year, my attention was drawn to a dramatic difference in issue figures for 2001/2002 in the five divisions that make up my library service in Lancashire. Two divisions had significantly different changes to the other three. I sent an email to my Divisional Managers along the following lines.

*On the down side:*

**Junior non-fiction issues for your Divisions are down by 11.1% and 7.3%**
respectively. This is against the other Divisions which range from 2.2 to 3.8. The actual issue figures reported from the system are 70,536 and 65,402. Let me know ASAP if you disagree with these figures for your JNF issues and also comments on the reasons you think may be behind this level of decline.

On the up side:

Your Divisions are the only ones which have shown an increase in Junior Fiction 352,363 (+3.3%) and 310,431 (+2.1%) respectively. This is against other Divisions which report JNF declines of between 1.6% and 4.6%. Again your initial thoughts would be helpful.

The responses to the decline in junior non-fiction issues included the following:

• This Division’s issues have declined on a steeper curve than other areas because we have tried to maintain the full range of stock rather than cashing in on the National Curriculum which demonstrates brief periods of intense interest

• Despite statistical evidence, the individual books on our shelves are being issued

• I’ll be looking next year at ways of promoting the stock as a single entity. (Hopefully blurring the distinction)

• Junior non-fiction issues across the division have been falling significantly over the last years

• Improved school library resources as a result of inspection regimes

• Use of People’s Networks for homework

• Poor quality of selection from suppliers

On the Junior Fiction issues:

• Promotion of Junior Fiction predominates

• Success of Bookstart

• Good quality stock in attractive libraries

• Large number of dump bins bought

• Summer activities and promotions

I suppose I was also disappointed that statistical returns made at the end of the year had not been accompanied by any managerial commentary from the Divisional Managers. This exchange about the junior issues put into perspective some of the concerns I had about the use of evidence in our planning and decision making. These responses are typical of a defensive reaction to a question that is perceived as a criticism of performance. Senior managers also need to learn how to ask the questions.

This is the first lesson we need to learn as managers if we expect positive use of statistics and evidence based research. The way in which we ask questions about performance, evidenced by existing statistics, will naturally be seen as a criticism of performance if the culture of using information positively is not perceived throughout the organisation. Even though I had asked for initial thoughts, the responses were based on reaction and assumption. There was no reference to further evidence and clearly some answers would not account for differences with the other three divisions. These were not all the answers but the messages reinforced the concern that had caused me to look for a longer-term solution to ensure we all made better use of evidence in our planning and decision making.

A few weeks after this exchange, I met a children’s specialist from one of the Divisions. With the usual level of enthusiasm, she outlined for me some of the action plans they were putting into place to try to improve the junior non-fiction issues in their division. She outlined a programme ranging from stock editing in some libraries to specific promotional projects in others. It is important that we do not dampen this natural enthusiasm but I wanted to probe behind some of the decisions to see what
information had been used to determine the action plans. Sadly it proved to be very little. In choosing specific libraries for the projects, she outlined there had been no analysis of each library’s performance in relation to others. Some libraries may have been performing at optimum level in this area. There was no analysis, which identified the better or poorer performers, and subsequently no benefit from identifying practice in high performers that could be used in other libraries.

This illustration is typical of many management situations, but we only have ourselves to blame if we have not created the environment which encourages meaningful evidence gathering and effective use of that evidence. What then do I want from a long-term project? What management change do I want to take place?

I wanted staff at all levels to:

• present credible and understandable evidence to support any suggestion for change in service
• look at the statistics they collect regularly and when they send them in to proffer a commentary and guide to managers about significant changes in performance
• have the skills and ability to analyse and question the credibility of statistics and to recognise the best context in which each set of data can be used
• be comfortable, skilled and confident to provide evidence based decisions and recommendations for improvements
• be able to turn to evidence that would support their decisions and demonstrate consistency and fairness in their application and implementation

On a broader level, we have struggled as an organisation to provide meaningful local performance indicators as part of our annual library plan. We have also learned from the evidence we had to gather to allocate new funds for improved library opening hours and other public library standards that Lancashire was failing to meet at the time. The complexity and scale of information required in this exercise was huge. We needed to be sure that improved opening hours were based on real evidence of need, and that we could also demonstrate to elected members and the public that improvements were being made with a degree of consistency and fairness across the County’s 84 service points.

The Lancashire – LISU project

The broad aims in these bullet points are not achieved overnight. There is no set of rules or procedures that can make these happen without a change of attitude about the use of statistics and evidence throughout the organisation. There will be opposition from managers who have been accustomed to relying on experience and professional judgements to make decisions. The project will harness and build on this experience and professional judgement and improve it with skills and abilities to support these judgements with hard evidence. We will need to show how this approach is effective in winning resources for service development in the competition for resources. We have just embarked upon this project with support from Resource, the Council for Museums Archives and Libraries. The next section of this paper will describe what we hope to achieve and how we propose to get there.

Evidence-Based Management in Action: Lancashire County Library Service – LISU

A Partnership in Developing Advanced Performance Evaluation of Service Delivery

Our press release stated:

In an exciting new development that marries research and practice, the Library and Information Statistics Unit
(LISU) at Loughborough University and Lancashire County Library and Information Service are to work in partnership in developing advanced performance evaluation of service delivery. The work will be partially funded by Resource – the Council for Museums, Archives and Libraries, and will entail a longitudinal programme of research and innovation directed towards developing performance evaluation tools and the skills to use them, and then assessing how that combination contributes to managing service improvement.

Using Lancashire as a working test bed, a range of quantitative and qualitative techniques will be applied to developing the evidence base for management decisions. This is to be complemented by a programme of staff training and development to extend the culture of evidence based management in the system. How such an approach enhances management practice and service delivery is then to be assessed. The collective corporate knowledge of the Lancashire system will be combined with LISU’s experience and expertise in performance metrics to yield new advanced solutions to achieving (and demonstrating) optimal performance. An important demonstration of the approach will be periodic independent external assessments or ‘health checks’ undertaken by LISU. Ensuring that appropriate new skills are inculcated and existing ones are developed through suitable training and ‘cascading’ regimes represents another important aspect of the project.

The Project, which started in June 2002, will encompass joint work on the following objectives:

- determination of key service components
- diagnostic assessment of service management styles
- general benchmarking ‘health checks’ of service
- consultation on current performance indicators and assessment of current methodologies
- identification of local indicators and their relationship to devolved management
- selection of metrics and evidence for evaluating performance
- determination of key indicators to complement the annual service plan
- design and development of new methodologies, including survey instruments and consultation on their relevance and applicability
- administration of data and evidence gathering
- analysis and interpretation of results
- application of results to decision making
- monitoring of outcomes of decisions made
- optimal dissemination of relevant information to appropriate stakeholders
- training and development of staff in applying performance evaluation and evidence supported techniques
- formative evaluation of project outcomes

Making it happen

This project is established for three years with funding from Resource, supplemented by ‘in-kind’ and cash contributions from Lancashire. If successful, budgetary provision will be made by Lancashire to ensure the project can be sustained and become part of the mainstream set of management tools at its disposal. From a management and Best Value perspective it is important to have the independent overview of an organisation such as LISU to provide an external evaluation and assessment of the service. Whilst the major funding and
external components are in place this scheme requires commitment from and ownership by staff at all levels in Library Service. This commitment and ownership will be the key ingredients for a successful recipe.

**How do we achieve this ownership and commitment?**

- The County Library Management Team agreed the scheme and as part of the budget planning process agreed to top slice from their devolved budgets the funding necessary for the next three years
- A Project Team has been established consisting of the County Library Manager, the two Assistant County Library Managers, two (from the five) Assistant Divisional Librarians, the Director and Deputy Director of LISU, and a Project Manager appointed by LISU
- We will concentrate on selling the scheme as part of the continuous improvement of the service and gathering the evidence to prove that Lancashire delivers high quality services. We recognise many staff will be discouraged if this is seen as an academic statistical exercise to satisfy Government standards and Performance Indicators that are removed from the reality of their day job
- A wide range of staff will be involved in different parts of the scheme
- We will plan a training programme over a long period of time that ensures staff have the skills and abilities to gather and use evidence-based research
- We will provide a newsletter specifically for the scheme to keep staff informed about the progress and benefits
- Front line staff will be involved in the process of developing and defining statistics required and the best methodologies for collecting them

The work has already started and LISU are currently analysing the range of statistical and other evidence and management information systems in place. The outline plan for the first year is set out below:

- An initial meeting to give a general introduction, discuss the outline research plan and health check required by Lancashire, identify and obtain copies of relevant documents. Discuss and agree methodologies for examination of specific areas, particularly the need to monitor before and after any proposed changes in service which Lancashire wish to introduce.

**Desk research by LISU Project Team – two key elements**

- Service mapping – what does Lancashire do? e.g. how many branches stock videos, how do they deal with complex enquiries, what agency services do they operate, what (if anything) is outsourced, what Service Level Agreements do they have, and so on.
- Evidence audit – how do they measure it? What statistics are collected, and how? What other evidence do they obtain (qualitative, social measures…)? This element would just look at what they have, not how they use it at this stage. It would incorporate some independent analysis of 2001-02 data, if required by Lancashire.

**Core management briefing**

A core management briefing will follow the initial desk research. This briefing will be a vital part of the programme in its early stages. It will provide the Senior Management Team with an outline of real achievements and set out what will be required in terms of commitment to make this work.
• What they do with the data they collect (who gets what, how figures are disseminated, what analyses are done)
• How does this relate to service delivery? How does it feed into Best Value, for example?
• What decisions are made as a result?
• What do they not collect which they feel would be useful?
• What do they collect but do not use?

Branch staff colloquium
This would only involve front-line staff, and would ask similar questions to those above:
• What they do (at branch/division level) with the data they collect. How is it disseminated and to whom? What analyses do they do themselves (if any)?
• What do they do with data returned from the centre (if anything)?
• How does this relate to service delivery on the ground?
• What decisions are made as a result at local level (if any)?
• What would they like to do with the data?
• What do they not collect which they feel would be useful?

Branch staff workshop
This will take place about a month or six weeks after the colloquium. This would be a hands-on session, showing the staff:
• what they could do with the statistics they collect
• how to get other information they need

Members of the LISU team would run it, with additional input from the Lancashire team.

Report year one
A report on the first year of the project should include:
• a comprehensive review of activities
• analysis of statistical procedures
• comparison to national norms and standards
• statistical benchmarking of the most recent years
• a section covering the Resource requirement for proposals on developing the methods for other domains

It is felt that the work will have transferability to other domains within the Resource portfolio. Early, informal discussions have taken place with the Museum and Archives Managers in Lancashire, and the project may be developed to include these domains in year two with formal plans being drawn up in the first year of the Library project.

This is a long-term commitment and requiring long-term benefits. How will we know if it has been successful? Here are some of the personal measures I would like to see:
• Staff make changes supported by documented evidence which contribute to the service plan for their service point, their Division and the County Plan
• A change in attitude to the collection and use of statistics from a mechanical collection exercise to the application of statistics in planning, promotion and evaluation of the service
• We have confidence in the statistics we collect and use
• We have eliminated unnecessary statistics and have automated as many as we can
• We have an independent health check system that satisfies Best Value and other inspection processes

• We have gained from the partnership with the academic and public library sector and can contribute to the development of meaningful national statistics and data gathering

Conclusion
This project is as much about changing cultures and attitudes about the use of statistics and other evidence in the day-to-day management of Library Services in Lancashire. If it is successful it will not only provide a model for other services, but also provide transferable benefits for Museum and Archive services. We are also sure our colleagues in the academic world will benefit from working with the service staff in the development and collection of data for performance management.

References