

Conferencia plenaria Statistics and Evaluation in the Promotion of Libraries Michael Heaney

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I last visited Argentina when the IFLA Congress was held in Buenos Aires in 2004. I am delighted to return to this wonderful country now, and I thank Marcela Fushimi (and her colleagues on the organising committee of the Second Workshop on Library Evaluation Indicators) for giving me the opportunity to speak to you today. I am sorry that I cannot speak to you in Spanish, and I am grateful to the translators and interpreters who will help us to communicate with each other today. I hope that you will be patient with me and forgive any mistakes or misunderstandings.

Please also forgive me if you already know about the things I am going to say today. I want to talk about the principles which support statistics and evaluation. We all undertake the collection and evaluation of statistics – you would not be here today if you were not interested in the work – but sometimes it is useful to stop and think about the reasons for doing it, and to put our activities into an overall context.

I have used data published by the Libraries of UNLP to provide examples: Evaluación Objetiva De Las Bibliotecas De La UNLP Año 2006 and Encuesta De Calidad Del Servicio 2007 De Las Bibliotecas De La Universidad Nacional De La Plata.

People sometimes think that statistics are boring. Is it really interesting that the Libraries of UNLP (this university) had 55,500 active readers in 2006, or that 502,000 items were consulted? (Informe basado en datos estadísticos de las Bibliotecas (año 2006)) More importantly, how should we react to these figures? When we are told that 502,000 items were consulted, should we be pleased, or worried?

I want to talk today about how to use statistics to promote libraries. There is a presumption in that sentence. We are presuming that libraries are good – that life is better because of libraries. And that is the first point I want to make. People often confuse statistics and evaluation. It is important to be clear about the concepts. It is time for some definitions.

'Data' are basic figures. The fact that 502,000 items were consulted in the Libraries of UNLP in 2006 is a datum.

'Statistics' is the juxtaposition of two or more elements of data. For example, there are 55,500 readers and 502,000 book issues each year, which means that on average each reader uses 9 books.

The third definition is 'performance indicator'. This happens when we look at statistics and say 'this is good' or 'this is bad'. The same statistic can be sometimes seen as 'good' and sometimes seen as 'bad'. For example, let us say, in a certain public library 40% of the budget is spent on staff. The chief

librarian says this is good because the majority of the budget is spent on books. The leader of the trade union says it is bad because the staff are paid too little.

I am going to talk next about gathering data and then about using it.

Gathering data: Counting and surveys

There are three ways of gathering data. We can use machines to count, we can count things ourselves, or we can ask people questions.

Using machines

It is very easy if you have a machine that counts, for example a computer – and some events are difficult to count if you do not have a machine or a computer to help you

The number of items in the catalogue
The number of books loaned
The number of photocopies made
The number of people entering the library through a control gate

Counting

It is relatively easy to count physical objects:

The number of seats in the library
The number of computer terminals in the library
The number of readers

It is also easy to count money:

The amount of money spent, on staff, on books and journals, on the building.

The amount of income received

You can also count events:

The number of readers entering the library (if you do not have a control gate) The number of questions readers ask in the library

If you cannot count all the events, it is often useful to count some of them:

The number of readers entering the library in one week
The number of questions readers ask in the library in one week
The number of questions people ask by email in one week



Surveys

There are some things which counting cannot tell you. It is necessary to ask people.

What did you do in the library today?
Was your visit to the library successful?
Are you satisfied with the library?
What is more important to you: more books or longer opening hours?

It is more expensive to ask people than to count things.

How data are gathered and the significance of the different methods

It is important to understand that how the data has been collected. The method of collecting data can alter the result.

If you only count readers who enter the library during one week, then the week in which a holiday occurs will not be typical.

If it is raining when you count the readers, do more people enter the library (because they want to escape from the rain) or do fewer people enter library (because they don't want to get wet travelling to the library)?

If the library is housed in two buildings and you count people who come through the door, then people who move between the buildings will be counted several times .

If you use the internet to carry out a survey, you will not gather the opinions of people who do not use the internet.

If you count how many times each book loan is renewed, then that is affected by the length of the loan period. A shorter loan period means more renewals.

Using data

Why do we collect data? The reason is, of course, to construct statistics and to use the statistics as performance indicators. We use performance indicators for two main purposes: for the management of libraries, and in political advocacy.

Data for management

The first question that a library director asks is, 'Is my library efficient?'.

Inputs and outputs

Some of the figures we can collect are inputs:

what are the resources of the library that it uses in providing services to readers? The income and expenditure, the number of staff, the number of entries added to the catalogue, the number of books acquired, are all useful.

We can ask, for example, how much does it cost to catalogue each book? What proportion of expenditure is spent on acquiring books? How many books are acquired in each language?

Other figures are outputs

How many books are borrowed? What is the cost of each loan? How many enquiries are answered? What is the cost of each answer? How many visits to the website How many readers visit each day?

When we compare inputs and outputs, we are investigating how efficient the library is. We are measuring the activity of the library.

Benchmarking

We can also compare one set of figures with another set of figures. Most managers will want to compare figures from the current year with the figures from previous years – this is benchmarking. Benchmarking is very useful for making plans. Of course, this means that you are now using performance indicators – do you want to make a specific figure bigger or smaller?

We may also want to compare our part of the library with other parts. For example, the knowledge that in 2006 in the Libraries of UNLP there were 73% professional staff in Engineering (Ingeniera) is not itself very helpful. But if we then see that in Veterinary Science (Veterinaria) there were only 29% professional staff, we can ask ourselves about the reasons for the differences.

We may also want to compare our library with other libraries, but if you do this, you must be sure that the figures really are comparable – a typical problems is comparing loans between libraries – loans are really only comparable if the terms and conditions are the same – the loan period, the number of books a student can borrow, the consequences of breaking the rules about borrowing.

Statistics for planning

You can also use statistics to set targets for your future development. In fact, without statistics, planning can be almost meaningless. If you say, 'I want to improve the selection of books for students', how can you demonstrate that you have achieved your target? All your planning targets should be measurable in some way. In this example, there are many different measurements we can use to demonstrate success:

Increase the proportion of new books Increase the percentage of new stock that is borrowed Ask the students directly, before and after

You can choose any of the examples I have given as your criterion for success, but if you really do want to use statistics for planning, then publication of targets **in advance** is important: state your goals so that we can judge when you achieve them.



Data for advocacy

I have called this presentation 'Statistics and Evaluation in the Promotion of Libraries'. This is because the most important use of statistics is not to measure library activity, but to demonstrate that the library brings benefits to its community. Remember the difference between statistics and performance indicators. We can look at statistics and say 'this is good' or 'this is bad'. But these 'values' come from outside the statistics. They arise from the values we have in our everyday lives. For librarians, it is almost an axiom that libraries are good. Therefore, we should encourage people to use libraries.

If other people share our values, then having measures for output are all that is necessary. You can show them how many people use the libraries, and if the figures rise, everybody will be happy. But this is not enough. Libraries do not exist outside of their social context. We need to compare them against other social institutions, or against other parts of our own institutions – for example, a new hospital; or in a university, new student accommodation. How can we prove that libraries are useful and that it is worth spending money on them?

Outcomes

To show that libraries are useful, we must look not at outputs but at outcomes. The outputs describe how people use libraries. The outcomes describe what happens as a result of people using libraries. There are two kinds of outcome – direct outcomes and indirect outcomes.

We find out about direct outcomes by asking people:

What did you do in the library?
Did you find want you wanted?
Are you satisfied with the library services?
What would you do if the library was not available?

For example, there exists a draft survey compiled by IFLA, which proposes the following questions:

Demographic questions (e.g. age, sex)

How often do you visit the library or use online library services

If you do not use the library, why not (for example, it is too far away, the items I want are not available, and so on)

What do you do in the library?

What online library services do you use?

Have you benefited from visiting the library or using its online services?

If this library did not exist, could you have got the same information elsewhere?

Notice that the survey also asks a question about people who do not use the library. As a consequence this survey must be completed outside the library – the collection method will be very important.

The last two questions are very important. How do people benefit from libraries?

- 1. Have you developed new skills or learned something new?
- 2. Have you obtained new ideas, new interests?
- 3. Have you got helpful information for school/learning?
- 4. Have you got helpful information for job seeking?
- 5. Have you got helpful information for health and well-being?
- 6. Have you got helpful information for business and commerce?
- 7. Have you got helpful information about your community?
- 8. Has the library helped you to save time?
- 9. Has the library helped you to be better in your job?
- 10. Have you enjoyed the visits; have you felt comfortable in the library?
- 11. Have you experienced the library as safe and quiet place for study and reading?
- 12. Have you made contacts with other people?

Can you get the information elsewhere?

- 1. From another library?
- 2. Via the Internet?
- 3. From colleagues, friends etc.?
- 4. In the media (newspapers, radio, television)?
- 5. Perhaps, but it would have taken more time and effort
- 6. No, I do not think I would have got the same information

Thee answers to these questions provide evidence about the direct benefit which libraries bring to society.

Proxies and drivers

Libraries cost money. The university, the city or the regional government must decide how much to spend on libraries. We cannot speak in favour of libraries and ignore other important areas of expenditure – for example, the environment. We must make sure that we connect our statistics about libraries with statistics about society as a whole.

Demographics

We must understand the demographic context. The data from 2006 published by the libraries of UNLP give us some useful information.

Nivel de penetración de las bibliotecas en su comunidad académica

	Población	Usuarios	Penetració
	total	total	n
Odontología	4849	243	5%
Informática	4742	414	9%
Bellas Artes	11236	998	9%

Pública	113690	16192	14%
Naturales	3776	746	20%
Bachillerato	1529	322	21%
Trabajo			
Social	2332	657	28%
Arquitectura	6912	2030	29%
Económicas	13310	5318	40%
Agrarias	2478	1038	42%
Medicina	6743	2829	42%
Ingeniería	5169	2311	45%
Veterinarias	3477	1696	49%
Humanidad			
es	15152	7797	51%
Derecho	14066	7542	54%
Periodismo	6422	3668	57%
Liceo	1388	830	60%
Anexa	1479	912	62%

Maybe we can understand why dentists do not use the library much, but how do we explain the figure for information scientists? And how do we explain the immense difference between these subjects and a subject such as Law? I do not doubt that there are reasons for the differences, but without the contextual information we cannot assess the significance of the 998 Fine Arts users compared to the 657 Social Work users.

Non-library data

It can be very useful to compare library data with other information, for example

Students' success in examinations Students' success in finding employment

If we can successfully make correlations between these figures, then we can demonstrate the contribution the libraries make to society.

I described a few minutes the differences in the penetration of the different libraries in UNLP. But it is important to understand the real significance of the figures. The number of readers is an 'output'. It is not an 'outcome'. Similarly, the number of items circulated is an output. It is possible to increase the numbers books loaned without increasing the real value of the library to the community. If you reduce the loan period by 50%, you will increase the number of loans but you will not have changed any outcomes. So if you use the statistics to benchmark against your future performance, you must understand the significance of the figure and how it helps. A real increase in the number of readers is a 'proxy' for a real change in outcomes. It is difficult to measure outcomes directly (you need to ask people about outcomes in a survey, but it is much easier simply to count them). So decide what you want to improve, then find a figure which will measure it – either directly or indirectly. As I mentioned earlier, there are only three ways of getting data, and the one that may tell you most about outcomes is to do a survey – and that is also the most expensive method.



Narrative

But in the last analysis I must admit that for most people statistics are still boring. If you understand statistics they can be very useful. But people are much more interested in stories. The most successful users of statistics do not rely upon the figures alone. They illustrate the statistics with stories. For example, in 2006 there were almost 200,000 visits to the UNLP website, most of these to the Humanities pages. To prove that the website visits are useful, a story would be useful. Perhaps a student writes to you and says 'I found the collection of all the presentations from the recent symposium in your institutional repository . It was very useful to have all this information together so that I could read it online. I could not have found and acquired the information easily without the website'.

The easiest way to obtain stories is to do a survey. The survey will ask the usual questions about the use of library services and about satisfaction with the library, but it is always very useful to ask for comments – to provide a place on the survey form where the respondent can write down whatever they want. There can be a sentence to guide them, for example 'Tell us how the library helps you most', or 'What is the most important thing we can do to help your work or study?' You can even ask very specific questions: What was the best thing that happened while you were using the library this week? But you must not be afraid to ask also, 'What was the worst thing?'! It is very important to recognize that every library or service can have problems. Until you understand the problem, you cannot solve it.

The combination of statistics and stories can be very powerful. When you are in discussion with somebody who has a different point of view, stories help you to make your point of view real. And statistics are good neutral ground; instead of saying, 'I am right, and you are wrong', we can say, 'Let us see what the figures tell us'. Of course, that still requires us to interpret figures as 'good' or 'bad', but at least you and your opponent are talking about facts, not just about your opinions and points of view. The statistics will not engage interest by themselves, but they are useful tools to support your case.

In summary, I have tried to give you a very simple message

Statistics are just numbers
Performance indicators impose values on statistics
Our values come from 'outside' the statistics
Planning involves trying to meet our values
Advocacy relies on the values we have
Advocacy needs stories as well as statistics

-so let's go ahead – and let's start by collecting some numbers!