DOCUMENT RESUME

ED 329 270 IR 053 461

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TITLE	Measuring the Performance of Public Libraries. A Draft Manual.
INSTITUTION	United Nations Educational, Scientific and Cultural Organization, Paris (France). General Information Programme.
REPORT NO	PGI-89/WS/3
PUB DATE	Jan 89
NOTE	100p.
PUB TYPE	Guides - General (050) -- Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Attitude Measures; Data Interpretation; *Evaluation Criteria; Library Collections; Library Facilities; Library Personnel; *Library Services; Library Surveys; Mathematical Formulas; Operations Research; *Performance Factors; *Public Libraries; *Questionnaires; Research Methodology
IDENTIFIERS	Library Systems Analysis

ABSTRACT

This manual identifies a series of performance measurements which, when assessed in their totality, can effectively measure a public library's level of service to its users. The measures have been developed at two levels. On one level, the measures can broadly evaluate the overall performance of library systems on the national level; on a second, more detailed level, the measures can be developed to assess an individual library's performance. Mathematical formulas provide a means of measuring the library's level of service in terms of its books, periodicals, sound and video recordings, pictures in stock, annual additions, and turnover rate; professional and para-professional staff availability; total floor area of building, library business hours, geographical accessibility; loans and circulation rate, library visits, percentage of lending service, attendance at library activities, reference and information transactions, user satisfaction with library stock, requests, and reservations. Ways in which consumer opinion can be surveyed are discussed, and guidelines are provided for adapting the measures to the particular situation and interpreting the results. An eight-item selected bibliography and a glossary of terms and definitions conclude the manual. (MAB)

PGI-89/WS/3

Measuring the performance of public libraries

A draft manual

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General Information Programme and UNISIST

United Nations Educational, Scientific and Cultural Organization

Paris, 1989

Original : English

PGI-89/WS/3
Paris, January 1989

MEASURING THE PERFORMANCE

OF PUBLIC LIBRARIES

A draft manual
prepared by

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United Nations Educational,
Scientific and Cultural Organization

Recommended catalogue entry :

MOORE (Nick). - Measuring the performance of public libraries / prepared by Nick Moore /for the/ General Information Programme and UNISIST. - Paris : Unesco, 1989. - 94 p. ; 30 cm. - (PGI-89/WS/3)

I - Title

II - Unesco. General Information Programme and UNISIST

PREFACE

These guidelines began life in 1984 in the Section on Public Libraries of the International Federation of Library Associations (IFLA). The Section decided that a practical set of guidelines were needed to help public librarians measure the performance of their services.

A specification was drawn up for the work and financial support was requested from Unesco. In 1986 the specification was sent to a number of research contractors who were asked to put proposals forward.

The aim of the contract was to prepare "a manual of public library performance measurement techniques which will be capable of application in the widest possible range of countries. The manual should build on existing tried and tested performance measurement techniques, relating these to the different contexts within which public libraries operate."

A draft of the manual was prepared for discussion by the project steering committee at the 1987 IFLA Congress. Following that discussion a revised version was prepared for more extensive consideration, testing and comment. Public libraries in Britain, Denmark, New Zealand, Sierra Leone and Sweden have contributed to this second stage.

The members of the Steering Committee were :

W. Andresen, Salzgitter, East Germany
G. Dillsworth, Freetown, Sierra Leone
E. Di Mattia, Stamford, USA
P. Sanz, Massy, France
M. Törngren, Stockholm, Sweden
H. Tait, Auckland, New Zealand

As a result of the comments and suggestions received, this current version of the manual has been prepared. The nature of public libraries means that there will never be a final, definitive version. The public library systems differ so widely from country to country that it will never be possible to produce a universally applicable document. It will always need modifying to suit local circumstances.

We hope that we have been able to produce a manual which will give practical help and a basis for local application and development.

This work has been prepared by Nick Moore under contract with IFLA.

The designations employed and the presentation of the material throughout this document do not imply the expression of any opinion whatsoever on the part of Unesco.

Readers are invited to send comments, suggestions or requests for additional copies to Mr. Abdelaziz Abid, Division of the General Information Programme, Unesco, 7, Place de Fontenoy, 75700 PARIS, France.

CONTENTS

CHAPTER ONE: INTRODUCTION

Performance measurement should be an essential part of every organisation. Without assessing its performance an organisation cannot ensure that it is using its resources to the greatest effect. Neither can it be sure that it is continuing to meet needs within society.

The aim of this manual is to suggest ways in which public librarians can measure the performance of the services they operate. The intention is to provide a basic common approach which can be used widely in different countries.

The manual has been derived from a synthesis of different approaches to the problem of measuring public library performance. The emphasis is firmly on practical measures which can be applied at relatively low cost by busy public librarians.

This is the initial draft of the manual and it is hoped that it can be tested in this form in a range of different countries. The results of these tests will be used to revise the manual and to produce a final version which can be published by Unesco.

The need to develop a manual which can be applied in different countries throughout the World presents difficulties. There are very big variations in the nature and organisation of public libraries in different countries. Further, there are significant variations in the resources available for measuring performance. Finally there are problems of definition and terminology. In the light of these factors a conscious effort has been made to concentrate on broad principles and basic techniques. These can be applied together as a package. Alternatively, it is quite possible to select and apply only those techniques which relate to local circumstances. Individual library associations can make a significant contribution by adapting the manual to meet the requirements of different countries.

These measures have been developed at two levels. Level One measures are concerned with the broad overall approach and should provide measures for use nationally or when measuring the performance of library systems. Level Two measures suggest the type of measures which can be developed in cases where a more detailed examination is required - usually when measuring the performance of an individual library.

Chapter Five discusses ways in which consumer opinions can be surveyed and it is followed by two chapters which indicate how the measures can be adapted and how the results can be interpretted. The manual concludes with a bibliography and a glossary of terms and definitions.

Performance measures are an important part of the overall **management information system** of the library or library system. They are not, however, the complete answer. Librarians and library managers also need information about the internal operations and processes of the library - the rate at which books are catalogued, the workload of staff, for example. This manual does not attempt to cover these internal operations and procedures. It concentrates on measuring the level of service provided to the library users.

CHAPTER TWO: MEASURING PERFORMANCE

As we have seen, all organisations need to measure their performance if they are to use their resources effectively and remain relevant to the needs of the communities they serve. In some organisations the process of performance measurement is quite easy. All that is required is to count things like the number of units sold or the number of people making use of a facility. For public libraries, however, the question is rather more complicated.

Public libraries do not have a single output, rather, they provide a range of services which set out to meet a variety of different needs within the communities they serve. Accordingly, simple measures such as the number of books borrowed or the number of visits to a reference library provide only a partial picture of the actual performance of the public library service. What is required is a coordinated pattern of measurements which, when considered together, provide a more thorough picture of the way in which the library service is making use of the resources available to it and the extent to which it is meeting needs within the community it serves.

This manual attempts to identify that pattern of coordinated measures. It has been compiled in accordance with eight basic principles:

- Performance measurement should be an integral part of the management process.
- The measures should relate performance to the requirements of consumers.
- The measures should assess performance within the limits set by the levels of resources available.
- Performance should be measured in the context of the library's objectives.
- Public libraries provide an amalgamation of different services.

- The level of measurement should be determined by the amount of detail required.

- Comparison is an essential aspect of performance measurement.

- Basic measures should be adapted to suit local circumstances.

It is worth considering each of these basic principles in more detail.

Performance measurement should be an integral part of the management process.

Management is a cyclical process which involves assessing the nature of needs within the community; establishing objectives in the light of those needs; developing services which will enable the objectives to be realised; operating the services; measuring their performance; revising objectives in the light of performance and changing needs, and so on. As such, the measurement of performance is an essential and integral part of the management process. For this reason it should be seen as a continuous process. Useful information will be obtained by a single measurement of the performance of a service. The value of that information will, however, increase greatly if the measurement is repeated at regular intervals. The performance measurement process, therefore, needs to be such that it can be operated easily and cheaply.

The measures should relate performance to the requirements of consumers.

Public libraries exist to provide services for people. The services provided are only of real value if they are valued by those for whom they are provided. To an extent this will be reflected in the use made of the services - few people will continue to use a service which they do not value. The performance measurement system should, however, attempt in some way to go further and to establish what the consumer preferences are.

Here it is important to distinguish between **wants** and **needs**. In the simplest terms consumers are conscious of their **wants** but are unaware of their **needs**. Some public libraries confine themselves to satisfying the **wants** of their consumers. They concentrate on providing the services for which there is an obvious demand and they tend to assign a low priority to services which attract low volumes of use. In contrast, other public library services place a higher priority on meeting the **needs** of their consumers. Such public libraries are less concerned with the services for which there is a high demand, preferring to give priority to the services which they judge their consumers need even though the consumers may not by themselves generate a high demand for the service. Both approaches are equally valid and for this reason the term consumer requirements will be used rather than the terms wants or needs.

The measures should assess performance within the limits set by the levels of resources available.

Some people express the view that when attempting to measure performance it is misleading to consider the resources used by the library service - the inputs. The measurement process should, it is argued, concentrate on the outputs or the quality and quantity of service provided. To an extent this is a valid argument. It does, however, overlook the fact that the level of resources available to the library service ultimately determines the potential level of performance which can be expected of that service. It would be reasonable to expect, for example, that if the level of resources is increased the level of performance should also rise. More particularly, it is unreasonable to expect to achieve a high level of performance if only minimal levels of resources are provided for the purpose. What performance measurement should attempt to do is to assess the quality and extent of service provided within the level of resources available.

To this extent, performance measurement is concerned with measuring the efficiency of the library service.

Performance should be measured in the context of the library's objectives.

It is extremely difficult to measure a library's performance without having a clear understanding of the library's objectives. The objectives should indicate what the library is attempting to achieve. In this way they indicate which aspects of the service should be measured. They also provide the essential context within which the results of the performance measurement needs to be considered. Different aspects of the service will be assigned different levels of priority and it is necessary to take account of this.

Library A may, for example, have as its main objective the provision of reference and information services to local industry and commerce. Library B, on the other hand may have the provision of a recreational lending service as its main objective. The form of the service will be different in the two libraries, and this difference will need to be reflected in the performance measures used.

Identifying exactly what a library's objectives are is an important part of performance measurement. Without a clear statement of objectives it is difficult to know what is to be measured.

It is only by introducing the concept of objectives that it becomes possible to move from the measurement of **efficiency** to the measurement of **effectiveness**. In this context, **effectiveness** is defined as the extent to which the library is able to achieve its objectives.

Public libraries provide an amalgamation of different services

It is impossible to think of public libraries providing a single, unified service. In reality, they provide a variety of different types of service, each directed at different client groups. This range of different types of service needs to be recognised if effective measures are to be developed and applied. Different measures will be required, for example, to assess the performance of the reference service from those required to assess the performance of the lending service. It is therefore necessary to identify the different types of service and to measure these separately. Together, the results will provide an overall picture of a library's performance.

The level of measurement should be determined by the amount of detail required.

For most purposes it will be sufficient to measure the overall performance of a library service. This general approach should provide sufficient information for most purposes. It will provide a basis for broad comparisons and, perhaps more important, will not require major effort to be expended in collecting data.

There will, however, be certain circumstances which require more detailed information, looking in some depth at the performance of the different activities which together make up the overall library service. Such measurement will provide much more detailed information but will also require more effort to be expended in its collection.

To accommodate this two levels of measures have been developed for this manual. **Level One** is concerned with the broad, overall approach and should provide measures suitable for most purposes. **Level Two** suggests the type of measures which could be developed in cases where a more detailed examination is required. When planning the measurement of a library's performance consideration should be given to the amount of detail required.

Comparison is an essential aspect of performance measurement

A certain amount will be learned from the measurement of a library's performance. Such a single measurement exercise will provide some useful information. The value of the information, however, will increase greatly if the library's performance is compared with other similar library services. Equally much can be learned by considering the performance of the library this year and comparing it with performance in previous years.

The element of comparison is, therefore, a crucial part of performance measurement. Because of this, it is necessary to take certain steps to ensure that like is compared with like.

Basic measures should be adapted to suit local circumstances

Public libraries should reflect the communities they serve. For this reason, no two public library services are identical. Accordingly, it is necessary to adapt and modify these performance measures to suit local circumstances. This is particularly so with this manual which has been designed for use in a range of different countries. It would be impossible to produce something which took full account of all local circumstances. Instead the manual attempts to present a basic approach to performance measurement which should be generally applicable but which will need amending in the light of local circumstances.

National library associations have a particularly important role to play in this process of adaptation to meet local needs.

The measures can also be adapted to suit the statistics which are already collected by the library. For many of the measures which follow it will be possible to use information and statistics which already exist. The important thing is to be consistent, especially when making comparisons.

In some cases library automation systems generate statistical information. This can often be used in the performance measures. Indeed, it may be possible to program the system so that it generates the performance measures automatically.

CHAPTER THREE: MEASURES OF RESOURCES

The level of resources available to a public library sets a limit on the level of performance of which that library is capable. As we have already noted, it would be reasonable to expect that the higher the level of resources available to a library the higher would be the performance which could be achieved. Equally, it is unreasonable to expect a high level of performance from a library which is starved of resources. An important part of performance measurement, therefore, is the measurement of the resources consumed.

One way to measure the level of resources would simply be to establish the annual expenditure on the library service. This would not, however, provide a very useful picture. The main deficiency is that such an approach provides no information about the way in which the resources are allocated.

To overcome this we must look instead at what those financial resources are used for. Broadly we must concentrate on **books and other materials, staff** and **buildings.** Libraries make use of other resources, such as vehicles, display equipment and so on, but books, people and buildings are the key elements.

Even if we measure the amount spent on books and other materials, on staff and on buildings we get only an approximate measure of resources. In particular we get measures which are of limited value when they are used for comparisons. The reasons for this are that expenditure figures can be distorted by inflation and by variations in accounting and administrative arrangements.

So, expenditure figures should be used with some care. It is usually more reliable to measure how many resources were obtained by the expenditure.

Measuring the overall levels of resources used by a public library is only of limited value as the amount of resources should vary according to the size of the population served by the library. In most cases, therefore, it is necessary to express the levels of resources used in relation to the number of people who live in the community served by the library.

If we are looking at the public library service in a whole country, the population served is, quite clearly, the population of that country. In the case of a public library system it is necessary to establish the population of the government or administrative unit served by that library system.

If, however, we are attempting to measure the performance of an individual library there may be difficulties in calculating the population that it serves. Sometimes it is obvious which community a public library serves and it is an easy matter to discover the population of that community. In other cases, however, there is frequently a great deal of confusion about precisely which community is served by a particular library.

In urban areas, for example, there is seldom a clear boundary between the catchment area of neighbouring libraries. In such circumstances it is necessary to establish agreed boundaries around the communities served by different libraries. To do this it is first necessary to take a map of the area served by the whole library system. Using that map mark the locations of the individual libraries. Then, working with the librarians concerned, draw approximate boundaries around each library. Wherever possible use natural boundaries such as rivers, railway lines, roads, etc. These natural boundaries will greatly influence patterns of movement and will have a significant effect on determining the catchment area of the different libraries. Finally, obtain population information from local planners and statisticians and use this to calculate approximate populations within each library catchment area. It is important to ensure that the catchment areas of different libraries do not overlap. The populations served by each individual library should not together add up to more than the population served by the library system as a whole.

Three factors can further complicate this process of calculating populations served. In some library systems there may be clearly identifiable areas which are not served by any of the individual libraries. If this is the case such areas should be excluded from the catchment areas of the individual libraries. They should, however, be included in any calculations relating to the performance of the library system as a whole.

A second complicating factor can be the use of mobile libraries. For the purpose of this exercise each stop for the mobile library should be treated as a service point and should be marked on the map. Boundaries should be drawn around each of those stops. The populations contained within each of those mobile library stops can then be added together to give a total figure for the population served by the mobile library.

The third complicating factor is the one most difficult to deal with. It relates to the situation, which frequently exists within library systems, where services are provided by a central library and a network of much smaller branch libraries. For some aspects of the service the central library will be expected to meet the needs of the whole community. This is often the case with centrally provided reference and information services. For other aspects of the service the central library will act in much the same way as the branch libraries, providing services only to those who live close to the central library. Childrens lending library services would fall into this category. The approach to be adopted will depend on the level of measurement taking place. For level one measures, where the aim is to measure the overall performance of the library service, the central library should simply be treated in the same way as all the other libraries although it is likely to have a slightly larger catchment area than the others. For level two measures where different aspects of the service are being measured the appropriate catchment area should be used according to whether the service is provided for the system as a whole or only for people living close to the central library.

To express the levels of resources used in relation to the number of people who live in the community served by the library it would be possible simply to divide the level of resources by the population served to give a figure 'per head of population'. This approach, however, frequently results in very small values and it is therefore more usual to express the level of resources 'per thousand population'.

Having calculated the population served it is now possible to move on to the actual measures of resources.

BOOKSTOCK LEVEL ONE: BOOKS IN STOCK

Measures

- Books on the shelves per 1000 population
- Books on loan per 1000 population
- Total books in stock per 1000 population
- Percentage of stock on loan

Aim

The aim of these measures is to show how many books are available to library users in overall terms and how many are actually available on the shelves of the library.

The percentage of stock on loan shows how heavily the stock is being used and indicates how quickly it will wear out.

Data

- Population served
- Number of books on the shelves
- Number of books on loan

Notes

- All the books on the shelves and on loan on a particular day should be counted. To do this item-by-item can be tedious and it is usually sufficient to count a sample and to use that to calculate the overall number. For example, it would be acceptable to take about 10 shelves at random, to count the number of books on those shelves and to calculate the average number of books per shelf. It is then simply a case of counting the number of shelves and multiplying by the average per shelf. When doing this, however, check that the averages are the same for fiction, non-fiction and junior books. If not, treat each category separately.

- Carry out the count on as near as possible the same day each year. When making comparisons between libraries try to ensure that the count is carried out on the same day in each library.

- Count only books which are easily accessible by library users. Do not count books awaiting processing in workrooms or books in reserve stores which are not accessible by the public.

Calculation

- **Books on shelves per 1000 population**

$$\frac{\text{Books on shelves}}{\text{Population Served}} \times 1000$$

- **Books on loan per 1000 population**

$$\frac{\text{Books on loan}}{\text{Population Served}} \times 1000$$

- **Total books in stock per 1000 population**

$$\frac{\text{Books on shelves + Books on loan}}{\text{Population Served}} \times 1000$$

- **Percentage of stock on loan**

$$\frac{\text{Books on loan}}{\text{Books on loan + Books on shelves}} \times 100$$

BOOKSTOCK LEVEL ONE: ADDITIONS AND EXCHANGES

Measures

- Annual expenditure on additions per 1000 population
- Annual additions to stock per 1000 population
- Annual exchanges per 1000 population

Aim

The aim of these measures is to show how many new books are available each year for library users to choose from.

Data

- Population served
- Expenditure on books in the last full year for which figures are available.
- Number of books added in the last full year for which figures are available.
- Number of books exchanged in the last full year for which figures are available.

Notes

- Additions to stock are new books which have been purchased for the library. Exchanges are books which have been transferred from one library to another. In that sense they are new to the library which receives them even though they may have been used elsewhere in the system already.

- If the library receives donations of books include them in the figure for annual additions.

Calculation

- **Annual expenditure on additions per 1000 population**

$$\frac{\text{Annual expenditure on additions}}{\text{Population Served}} \times 1000$$

- **Annual additions per 1000 population**

$$\frac{\text{Books added to stock}}{\text{Population Served}} \times 1000$$

- **Annual exchanges per 1000 population**

$$\frac{\text{Books received on exchange}}{\text{Population Served}} \times 1000$$

BOOKSTOCK LEVEL ONE: LIVE STOCK TURNOVER RATE

Measure
- Live stock turnover rate

Aim

The aim of this measure is to show the rate at which the stock is being refreshed or replaced by the addition of new and exchanged books.

If the size of the total stock remains roughly constant the live stock turnover rate indicates the number of years it will take to replace the whole stock of the library. Thus a live stock turnover rate of seven indicates that on average the whole stock would be replaced every seven years.

Data
- Books on loan
- Books on shelves
- Annual additions to stock
- Annual exchanges received

Notes
- The total number of books in stock is the number of books on loan plus the number of books on shelves which are easily accessible by library users.
- The figure for annual additions and exchanges should be the number of books added and exchanged in the last full year for which figures are available.

Calculation
- Live stock turnover rate

$$\frac{\text{Books on loan} + \text{Books on shelves}}{\text{Annual additions} + \text{Annual exchanges}}$$

BOOKSTOCK LEVEL TWO: MEASURES

Use the same basic measures as for **Bookstock level one** but sub-divide each measure into fiction, non-fiction and junior stock. Where appropriate include also a sub-division for reference books. In some circumstances it may also be desirable to sub-divide according to language, or according to subject.

OTHER MATERIALS LEVEL ONE: PERIODICALS

Measure	• Annual expenditure on periodicals per 1000 population. • Periodical titles received per 1000 population
Aim	To show how many periodical titles are available to library users.
Data	• Expenditure on periodicals in the last full year for which figures are available. • Population served • Number of current periodical titles received
Notes	• Count the number of titles subscribed to and received on donation. If more than one copy of a periodical is received, count each copy. • Exclude any professional or trade periodicals which are acquired solely for staff use. • Do not count back files of periodicals which are no longer received.
Calculation	• **Annual expenditure on periodicals per 1000 population**

$$\frac{\text{Annual expenditure on periodicals}}{\text{Population Served}} \times 1000$$

• **Periodical titles received per 1000 population**

$$\frac{\text{Periodical titles received}}{\text{Population Served}} \times 1000$$

OTHER MATERIALS LEVEL ONE: SOUND RECORDINGS

Measure	• Sound recordings in stock per 1000 population
Aim	To show how many sound recordings are available for library users.
Data	• Population served • Number of sound recordings in stock
Notes	• Count all sound recordings regardless of their format. • Count all sound recordings whether music or spoken word. • Some items will contain more than one cassette or disc. In such cases count as one item.
Calculation	• **Sound recordings in stock per 1000 population**

$$\frac{\text{Sound recordings in stock}}{\text{Population Served}} \times 1000$$

OTHER MATERIALS LEVEL ONE: VIDEO RECORDINGS

Measure
- Video recordings in stock per 1000 population

Aim
To show how many video recordings are available to library users.

Data
- Population served
- Number of video recordings in stock

Notes
- Count all video recordings regardless of their format.
- As with sound recordings, if an item contains more than one cassette or disc, count as a single item.

Calculation
- Video recordings in stock per 1000 population

$$\frac{\text{Video recordings in stock}}{\text{Population Served}} \times 1000$$

OTHER MATERIALS LEVEL ONE: PICTURES

Measure
- Pictures and posters available for loan per 1000 population.

Aim
To show how many pictures and posters are available for loan to library users.

Data
- Population served
- Number of pictures and posters available for loan.

Notes
- Exclude any pictures or posters which are permanently on display in the library and are not available for loan to library users.
- Include here maps and wall charts.

Calculation
- **Pictures available for loan per 1000 population**

$$\frac{\text{Pictures and posters in stock}}{\text{Population Served}} \times 1000$$

OTHER MATERIALS LEVEL TWO: MEASURES

Throughout, use the same measures as for Level One, but sub-divide each to show:

- Annual expenditure (See page 13 for method of calculation)
- Annual additions (See page 13 for method of calculation)
- The number on loan (Page 10)
- The percentage of the total stock which is on loan (Page 11).
- The live stock turnover rate (Page 14)

It may also be desirable to measure other items of stock, such as microforms, which are particularly significant in the library concerned.

STAFF RESOURCES LEVEL ONE: TOTAL STAFF

Measures

- Annual expenditure on staff per 1000 population
- Population served per member of staff

Aim

To show the overall level of staff employed to provide the public library service.

Data

- Expenditure on staff in the last full year for which figures are available.
- Population served
- Full-time-equivalent number of staff

Notes

- Count only non-manual staff. Do not count porters, janitors, caretakers, etc.
- Calculate the full-time-equivalent by adding up all the hours worked each week by part-time staff and dividing by the number of hours worked per week by a full-time member of staff.
- When measuring the performance of a whole library system, include all non-manual staff. When measuring the performance of individual libraries, however, count only the staff directly engaged in providing the service at that particular library. Exclude staff such as cataloguers who, while they may be based at a particular library provide support services to libraries throughout the system.

Calculation

- **Annual expenditure on staff per 1000 population**

$$\frac{\text{Annual expenditure on staff}}{\text{Population Served}} \times 1000$$

- **Population served per member of staff**

$$\frac{\text{Population Served}}{\text{Total full-time equivalent number of staff}}$$

STAFF RESOURCES LEVEL ONE: PROFESSIONAL STAFF

Measure

- The percentage of staff with professional qualifications.

Aim

To show the level of professional staff employed in the provision of the public library service.

Data

- The full-time-equivalent number of professional staff.
- The total full-time-equivalent number of staff

Notes

- Professional staff are those who hold a recognised qualification at professional level and who occupy a post which is graded as suitable for a professional librarian.
- Count only non-manual staff. Do not count porters, janitors, caretakers, etc.
- Calculate the full-time-equivalent by adding up all the hours worked per week by part-time staff and dividing by the number of hours worked per week by a full-time member of staff.
- When measuring the performance of a whole library system, include all professional and other non-manual staff. When measuring the performance of individual libraries, count only the staff directly engaged in providing the service at that library. Exclude staff such as cataloguers who, while they may be based at a particular library, provide support services to libraries throughout the system.

Calculation

- Percentage of professional staff

$$\frac{\text{Full-time-equivalent number of professional staff}}{\text{Total full-time-equivalent number of staff}} \times 100$$

STAFF RESOURCES LEVEL ONE: PARA-PROFESSIONAL STAFF

Measure

- The proportion of staff with para-professional library qualifications.

Aim

To show the level of para-professionally qualified staff employed to provide the public library service.

Data

- The full-time-equivalent number of para-professional staff.
- The total full-time-equivalent number of staff

Notes

- Para-professional staff are those who hold a recognised qualification at para-professional or library technician level **and** who occupy a post which is graded at para-professional level.

- Count only non-manual staff. Do not count porters, janitors, caretakers, etc.

- Calculate the full-time-equivalent by adding up all the hours worked per week by part-time staff and dividing by the number of hours worked per week by a full-time member of staff.

- When measuring the performance of a whole library system include all non-manual staff. When measuring the performance of individual libraries count only the staff directly engaged in providing the service at that library. Exclude staff such as cataloguers who, while they may be based at a particular library, provide support services to libraries throughout the system.

Calculation

- **Percentage of para-professional staff**

$$\frac{\text{Full-time-equivalent number of para-professional staff}}{\text{Total full-time-equivalent number of staff}} \times 100$$

STAFF RESOURCES LEVEL TWO: MEASURES

Throughout, use the same measures as for Level One, but sub-divide to show the number of staff associated with the provision of different services. The choice of service groupings will depend on the particular objectives of the service, but might include:

- Children's services
- Adult lending services
- Reference and information services

Special services, such as to housebound people, to ethnic minorities or to local business and commerce could be treated in the same way.

BUILDINGS LEVEL ONE MEASURES: SIZE

Measure
- Floor area per 1000 population

Aim
To show the size of library buildings in relation to the number of people using them.

Data
- Population served
- Total floor area in square metres

Notes
- Measure the overall floor area of the library. Include staff workrooms, corridors, etc.
- When measuring the performance of a whole library system measure all the premises used by the library system. When measuring the performance of an individual library measure only the floor area of that particular library. Exclude any space used by staff, such as cataloguers, etc, who, although they may be based at a particular library, provide support services to libraries throughout the system.

Calculation
- **Floor area per 1000 population**

$$\frac{\text{Floor area in square metres}}{\text{Population Served}} \times 1000$$

BUILDINGS LEVEL ONE: OPENING HOURS

Measures
- The total number of hours open each week
- The percentage of opening hours which fall outside local business hours.

Aim
To show how available the library services are to library users.

Data
- The number of hours open per week
- The local business hours

Notes
- When measuring the performance of a whole library system express the number of hours open for each individual library.
- Local business hours are the hours during which the majority of local shops and businesses remain open each week.

Calculation
- Percentage of opening hours which fall outside local business hours.

$$\frac{\text{Number of hours open per week outside local business hours}}{\text{Total number of hours open per week}} \times 100$$

Measure
- The percentage of the population who live more than two kilometres from a library, and more than one kilometre from a mobile library stop.

Aim
To show how accessible the library is for library users.

Data
- Population served
- Map of library catchment areas
- Population statistics

Notes
- This measure is particularly valid in urban areas. It is less reliable in rural areas or where libraries serve scattered communities.

Calculation
- **The percentage of the population who live more than two kilometres from a library, and more than one kilometre from a mobile library stop.**

On a map mark each library and draw circles around them with a radius equivalent to two kilometres. Do the same for the mobile library stops, but draw circles with a radius of one kilometre. Estimate how many people live outside these circles. Note that the local planners and statisticians may have population data which will assist the estimation process.

Having estimated the numbers of people living outside the circles express this as a percentage of the total population served, as follows:

$$\frac{\text{Population living outside the catchment circles}}{\text{Population Served}} \times 100$$

BUILDINGS LEVEL TWO: MEASURES

To obtain more detailed measures of the buildings resource refer to the **IFLA Standards for Public Libraries** and determine the extent to which the different functional areas of library buildings meet the space and accessibility standards set down.

CHAPTER FOUR: MEASURES OF OUTPUTS

Having measured the resources used by the library service, the next step is to measure the outputs generated by those resources. What follows are a number of output measures which can be used to assess the output of the service as a whole. They can also be used to focus on specific areas of service or on services to particular groups within the community.

Public libraries are provided for people to use. The key to the performance of a public library service, therefore, is the use which is made of that service. We noted in Chapter Two that a basic principle of performance measurement is that the measures should be related to consumer requirements that is the wants and needs of the individuals who are served by the library (page 4). If the service is able to satisfy consumer requirements then people will continue to make use of it. If it does not then use will decline. Equally, if its ability to satisfy consumer requirements increases then use is also likely to increase. The use made of the service, therefore, is the ultimate measure of performance or, more precisely, the measure of the library's ability to satisfy consumer requirements.

With certain aspects of the service it is possible to take things further and to measure the potential ability of the service to meet the requirements. Measures for this in connection with bookstock and the request service are suggested below.

It is important to remember that libraries do not set out to satisfy all consumer requirements equally. Some are given higher priority than others. These priorities should be reflected in the library's objectives. This brings us to another principle discussed in Chapter Two - the measurement of performance has to be set within the context provided by service objectives (page 5). So, the library's objectives should determine the scope and coverage of output measures.

If output measures are related to objectives in this way what the results show is the extent to which the library is meeting its objectives. To this extent, the output measures assess the effectiveness of the service.

By making use of the measures of resources it is possible to take things one stage further. By using output measures in conjunction with the resource measures it is possible to assess the extent to which the library is meeting its objectives **and how many resources are used in so doing.** This provides an added assessment of efficiency or the productivity with which the resources are being used. It conforms to a third basic principle which states that the measures should assess performance within the limits set by the levels of resources available (page 5).

Objectives may vary from library to library. The objectives will certainly vary from country to country. It is, therefore, impossible to set down the precise form of output measures which will be needed in different circumstances. What follows are the basic measures which will provide an overall picture. These are the Level One measures. In addition suggestions are made for Level Two measures, indicating how they can be modified to accommodate different service objectives.

LOANS LEVEL ONE

Measures
- Annual loans per 1000 population
- Circulation rate

Aim
To measure the use of the lending service and to assess the rate at which books are borrowed.

Data
- Population served
- The number of books borrowed per annum
- Total bookstock

Notes
- For the number of books borrowed use the total number of loans in the last full year for which statistics are available.
- Count renewals as a new loan. Count the loan of sets of plays, music, etc as a single loan.
- The total bookstock is the number of books on loan on a particular day plus the number of books on the shelves which are accessible to the public (see page 11).
- The **Circulation rate** is simply the number of times an average book was borrowed during the year in question.

Calculation
- **Annual loans per 1000 population**

$$\frac{\text{Number of books borrowed per annum}}{\text{Population Served}} \times 1000$$

- **Circulation rate**

$$\frac{\text{Number of books borrowed per annum}}{\text{Books on loan + Books on the shelves}}$$

LOANS LEVEL TWO

Sub-divide the Level One measures into fiction, non-fiction and children's. According to the library's objectives it may be worth considering further sub-divisions according to the types of material, such as sound recordings, or according to language or user groupings.

VISITS LEVEL ONE

Measure

- Visits made to the library per 1000 population

Aim

To show how many people actually visit the library during a year.

Data

- Population served
- Number of visits per annum

Notes

- If a library shares premises with other organisations, count only those visits made by people using library facilities.

Calculation

- **Visits made to the library per 1000 population**

In some libraries it may be possible to use a turnstile to count the number of visitors to the library. Alternatively, select two weeks, one in Summer and one in Winter or during a peak period and a slack period. During each week count the number of people entering the library. Multiply the total number of visits during these two weeks by 26 to give an estimate of the total number of visitors during the year.

$$\frac{\text{Number of visits made per annum}}{\text{Population Served}} \times 1000$$

VISITS LEVEL TWO

Sub-divide the Level One measures into adults and children. It may be worth considering collecting data on the number of visits to the reference library or to other specialist departments.

Measure

- The percentage of the population who have books on loan.

Aim

The aim of this measure is to show the penetration of the lending service into the community. Library membership records provide only a partial indication and a more realistic picture is provided by counting the number of people who actually have books on loan on a particular day.

Data

- Population served
- The number of people who have books on loan on a particular day.

Notes

- With some automated loan systems it is easy to obtain the necessary information. With manual systems it is sometimes more difficult and it is necessary to use a sampling technique (see Calculation below). Note that when sampling is used the result is not precise but it will give a good enough indication and can be used when making comparisons over time providing the method of sampling and calculation are constant.

Calculation

- **The percentage of the population who have books on loan.**

To estimate the number of people who have books on loan select two day's loan records at random and count the number of books on loan on those days. Re-sort the loan records into alphabetical order by the name of the library users. Count the number of library users who have books on loan. Divide the number of books on loan on those days by the number of library users. This gives an average number of books borrowed per library user.

Having calculated the average number of books borrowed per library user, divide the total number of books on loan by the average number of books borrowed per library user. The result will be a rough indication of the number of people who have books on loan at any one time.

To obtain the percentage of the population who have books on loan proceed as follows:

$$\frac{\text{Number of people with books on loan}}{\text{Population Served}} \times 100$$

ACTIVE USERS LEVEL TWO

It may be worth calculating the active use for both adults and children, or, where data are available, for specific groups.

ACTIVITY ATTENDANCE LEVEL ONE

Measure
- Activity attendance per 1000 population

Aim
To show how many people attend activities such as exhibitions, story-telling sessions and lectures which are organised by the library.

Data
- Population served
- The number of people attending activities in the last full year for which figures are available.

Notes
- As the nature of the activities greatly determines the numbers attending, any comparisons should be treated with care. Despite this the measure does give an indication of the impact made on the community.

- It is sometimes worth showing the average attendance per activity. Only do this, however, when the activities are broadly similar. It would be misleading, for example, to count attendance at a three-week exhibition and a story-telling session and then to average them.

- If a series of activities is organised, such as regular story-telling sessions, count attendance at each event.

- Count the number of people who attend activities during the course of a year. Unless the library runs a full and regular programme of activities it is difficult to estimate annual attendance on the basis of sample figures collected during a one or two week period.

Calculation
- **Activity attendance per 1000 population**

$$\frac{\text{Number attending activities per annum}}{\text{Population Served}} \times 1000$$

ACTIVITY ATTENDANCE LEVEL TWO

Sub-divide the activity attendance by adults and children. It may also be worth distinguishing between different types of activity and counting attendance separately.

REFERENCE AND INFORMATION TRANSACTIONS LEVEL ONE

Measures

- The number of visits to the reference library per 1000 population.
- The number of transactions per 1000 population

Aim

The aim of this measure is to show the overall use made of the reference and information service.

Data

- Population served
- Number of visitors during the course of a year
- Number of transactions during the course of a year.

Notes

- Where possible count the number of visits made to the reference and information department. (For a note on sampling see Calculation below). If it is not possible to distinguish between visitors to the reference library from those making use of other library facilities, either ignore this measure or collect the information by means of a consumer survey. Such surveys are discussed in Chapter Five.

- A reference and information transaction is defined as an occasion when a library user actually presents an enquiry to a member of the library staff. In other words do not count occasions when the library users find information for themselves.

Calculation

- If no regular statistics are kept of visits or reference and information transactions it may be necessary to estimate the annual figures by using a sample. As with the number of visits per annum (see page 33), take two sample weeks, one in the Summer and one in the Winter, count the number of people visiting the reference library and the number of transactions. Multiply the figures by 26 to give an estimate of the number of visits and transactions during the year as a whole.

- Visitors to reference library per 1000 population

$$\frac{\text{Visitors to reference library per annum}}{\text{Population Served}} \times 1000$$

- **Reference and information transactions per 1000 population.**

$$\frac{\text{Reference and information transactions per annum}}{\text{Population Served}} \times 1000$$

REFERENCE AND INFORMATION TRANSACTIONS LEVEL TWO

For Level Two measures sub-divide the transactions into those which are short and those which are complex. It may also be worth sub-dividing by subject group or by user group. Another way to look at the transactions is to divide them into those which require a qualified librarian to answer them and those which can be answered by all staff.

The most useful Level Two measure is the measure of success. Here the intention is to measure the extent to which it was possible to satisfy the user's immediate needs. This is not easy and it cannot be done automatically. Instead it calls for a small user survey. Such surveys are covered in Chapter Five.

STOCK CAPACITY LEVEL ONE

Measures

- Author success rate
- Subject success rate
- Percentage of stock published in the last two years.
- Percentage of stock published in the last five years.

Aim

The aim of these measures is to show the capacity of the stock to satisfy the demands of library users. It measures the ability of the stock to satisfy the demand for books by specific authors and the demand for books on specific subjects.

In addition to finding books on specific subjects and by specific authors, library users should be able to find an acceptable selection of recently published material. The measures of the age of the stock show how likely they are to be able to find such material.

Notes

- The measures are concerned with the choice actually presented to the library users when they visit the library. For this reason only the stock actually on shelves accessible to the public should be surveyed.
- If these measures are to be used for comparative purposes it is essential that the same lists of authors and subjects are used in each library.
- Ignore large print books designed for use by visually handicapped people.
- Do not forget to check the oversize books.
- If two or more titles by the same author are bound together in a single volume count each title separately.

Calculation

- Author success rate

To calculate the author success rate, select 20 authors whose work you would expect to find on the shelves of a good library. List the authors and check on the shelves which are accessible to the public the number of titles available by each author. Note that it is the number of titles not the number of copies which should be recorded.

Add the number of titles by each author together and divide by 20 to give a figure for the average number of titles per author. This represents the author success rate.

- **Subject success rate**

To calculate the subject success rate follow the same procedure but select 20 subjects instead of authors. Try to select subjects which are self-contained. The subject selected should be such that, in a good library it would be reasonable to expect to find between two and three books on each subject available on the shelves.

As with the author success rate, the subject success rate is the average number of titles available per subject.

- **Percentage of stock published in the last two years.**

- **Percentage of stock published in the last five years.**

To calculate the percentages of the shelf stock published in the last two and the last five years it is first necessary to select a sample of at least 500 books. Select this sample in a random way, ensuring that there is an even distribution of fiction, non-fiction and junior books.

One way to obtain this even distribution is to count the number of shelves in the library. Divide this number by 500 and round the result up to the nearest whole number. For example, if there were 1300 shelves in the library, divide 1300 by 500, to give the result 2.6. Round up this figure to the nearest whole number, giving the answer 3. Then select every third shelf and on each of these shelves sample the third book from the left hand end of the shelf. This should give a random sample which is evenly distributed throughout the library.

Having selected the sample count the number that had been published during the last two years and the number that had been published during the last five years and express each of these as a percentage of the total number of books in the sample.

STOCK CAPACITY LEVEL TWO

Base the Level Two measures on the same principles as for Level One. It will, however, be possible to go further and to check different types of authors and subjects and to make separate checks of the adult and children's stock.

It is also sometimes useful to compare the number of titles available on the shelves with the number available in stock.

It is also interesting to calculate the average use per volume in the last 12 months. This provides a fairly clear indication of the extent to which the stock is being used and shows any variations within the overall average level of use.

REQUESTS AND RESERVATIONS LEVEL ONE

Measures
- The percentage of requests satisfied in 2 weeks
- The percentage of requests satisfied in 4 weeks

Aim

To show the ability of the library to meet quickly demands for material which is not readily available on the open shelves. In particular, to show the likelihood of requested material being ready for collection on the next, or next but one visit.

Data
- Request and reservation records

Notes
- The intention is to assess the percentage of the requests which can be satisfied by the user's next visit or by the visit after that one. Research shows that most people visit public libraries on a regular cycle and that this cycle is related to the loan period. For example if the loan period is 2 weeks then most people will tend to visit the library every 2 weeks. The figures of 2 weeks and 4 weeks suggested in the measures are not absolute and, where necessary, they should be changed so that they relate to the loan period of the library.
- Include all requests and reservations whether for material in the stock of the library or for material which has to be obtained through inter-library loan or by purchase.

Calculation
- **Percentage of requests satisfied within 2 weeks**
- **Percentage of requests satisfied within 4 weeks**

Select a sample of 2 weeks, one in the Summer and one in the Winter. During each period make a distinctive mark on all requests and reservations taken. List each of these requests and reservations separately. During the subsequent 4 weeks record on the list when each of the requests is satisfied, noting both the date that the request was received and the date when it was satisfied. At the end of the 4 week period count the number of requests that were satisfied within 2 weeks and the number that were satisfied within 4 weeks and express these figures as percentages of the total number of requests taken during the period.

REQUESTS AND RESERVATIONS LEVEL TWO

Carry out the same sort of survey as for Level One but sub-divide the requests into fiction and non-fiction. It may also be useful to calculate the proportion which were satisfied from within the library's own stock, the proportion that were satisfied through inter-library loan and the proportion satisfied through purchase.

CHAPTER FIVE: CONSUMER OPINION

So far the measures have mainly been concerned with statistical information produced by the library service itself. These are sometimes referred to as **objective measures**. While these objective measures can provide very valuable information about the operation and success of the library they show only part of the picture. To get a complete view it is necessary to find out what the library's consumers feel about the service they receive. Here we are collecting information about **subjective** measures of performance.

To do this it is necessary to collect information from people in the community served by the library, and in particular from those who make use of the library. As with the objective measures it is useful to think about different levels of measurement. For the Level One subjective measures of consumer opinion it is possible to use two fairly basic surveys. One survey covers the general community - the **Community Survey**. The other is confined only to those people who use the library service - the **User Survey**. These surveys can either take the form of questionnaires which people complete by themselves and then return to the library, or they can be administered by interviewers.

It is, however, possible to explore consumer opinions in greater detail, and for this it is possible to use Level Two measures. These include **unobtrusive testing** where the researchers put themselves in the position of users and explore how good the service is; **attitude surveys** where the aim is to explore people's attitudes towards the service; **group discussions** where groups of people are brought together to discuss the library service, **depth interviews** where individuals are asked in considerable detail about their views of the library service and **checklists** of the views of users.

Both the Level One and the Level Two measures require careful thought and detailed planning. It is most important to begin by deciding what information you want to collect and, even more important, what you are going to do with it once you have it. It is always worth concentrating on a small number of key questions. Many surveys have failed to produce useful results simply because they collected too much information.

The actual design of the surveys will vary from country to country. Any social survey must reflect the nature of the society in which it is administered. It is not, therefore, possible to produce samples of community surveys and user surveys which can easily be adapted for use in different countries. Instead, what follows is some general information and practical guidance which should enable you to develop the most appropriate subjective measures for your country.

CONSUMER OPINION LEVEL ONE: BASIC COMMUNITY SURVEY

Aims

- To identify the demographic characteristics of users and non-users.
- For users, to identify the nature of the use made.
- To identify the reasons for non-use and lapsed use and the extent to which these relate to inadequacies in the service.

Notes

This information is intended to show whether there are any significant differences between the characteristics of users and non-users and whether there are any sections of the community which make particularly low levels of use of the library. It will also show the relative use of different aspects of the service. Finally it will identify both the reasons given by non-users for their failure to use the public library and those given by past users for ceasing to use it. The survey will also show the extent to which these are a reflection of the inadequacies in the library service.

Data collection

This information is best collected by a brief questionnaire survey of a sample of the whole community served by the library. The sample size will obviously depend upon the number of people in the community as a whole. As a guidance it will probably be necessary to survey between 1000 and 1500 people in order to achieve a final response rate of between 500 and 750. You are advised to consult a statistician on the sample size which would give statistically valid results for your particular community.

The next things to be decided are the method by which the sample will be selected and the way in which the survey will be administered. To a large extent these are inter-related.

Generally speaking two methods are use to select the sample. The first is to make a random selection of households - this can be done either from a register of households, such as an electoral register, or by selecting, say, every fifth or tenth house in a neighbourhood. In these cases it is possible to mail or deliver the questionnaire for recipients to complete unassisted. It is also feasible for the questionnaire to be used as an interview schedule.

The second method is a street survey, where interviewers stop people in the street and use the questionnaire as the basis of the interview. In this case, the interviewers will need the advice of a statistician to ensure they interview a representative sample of the community.

Sample questions

These will include information about the personal characteristics of the people surveyed. The most commonly collected information covers gender, age, level of education, occupation and, where appropriate, ethnic group and language spoken. The best way to collect the information is by providing a range of possible replies, with tick boxes for the replies. For example:

Are you ?	Male	☐
	Female	☐
In which age group are you?	under 15 years	☐
	16-25 years	☐
	26-59 years	☐
	Over 60 years	☐

The range of possible replies provided for questions about the level of education, occupation, ethnic group and language spoken will vary from country to country. It is advisable to follow the conventions for official statistics in your country. For example in many industrialised countries levels of education are measured by asking people when they completed full-time education.

How old were you when you completed your full-time education?	under 15 years	☐
	16 or 17	☐
	18 or 19	☐
	20-24	☐
	over 24	☐
	still in full-time education	☐

In some countries, however, it may be more important to collect information which relates to levels of literacy. In such cases it might be more appropriate to ask the question in the following way.

What is the highest level of education you have received?	none
	primary
	secondary
	higher education
	adult literacy

The main point of the survey is to identify who uses the library - whether they are frequent users, occasional users, lapsed users or non-users. The usual way to do this is by questions like:

Are you a member of a public library?	Yes
	No
When did you last use a public library? Was it within the last:	Week
	Month
	6 months
	Year
	More than a year ago
	never
	don't remember

It is then possible to ask users, lapsed users and non-users separate questions. For people who have used the library within the last year you might ask:

What did you use the library for?	
To return, renew or borrow books	☐
To return, renew or borrow sound recordings	☐
To read a newspaper or magazine	☐
To use the reference books	☐
To ask for or find some information	☐
To study using your own books	☐
To study using the library's books	☐
To browse	☐
To visit an exhibition or a display	☐
To attend a talk, story-telling or some other activity.	☐
To use other facilities eg. photocopier	☐
Other reasons (please write in)......................	☐
....	

The range of possible replies will clearly need to be amended to reflect the range of services the library offers.

On the other hand, lapsed users, that is people who last used a library more than a year ago, might be asked:

At approximately what age did you last use the library?		
	under 15 years	☐
	16-25 years	☐
	26-39 years	☐
	40-59 years	☐
	over 60 years	☐

While both lapsed users and non-users would be asked for the reasons why they do not make use of the library.

Can you say why you do not use the library?

Moved house	☐
No time	☐
Other interests	☐
Married/had children	☐
Not interested in reading	☐
Physical disability	☐
Couldn't read the books in the time allowed.	☐
Library stock inadequate	☐
Opening hours wrong	☐
Fines too high	☐
Staff attitudes	☐
Library inconvenient to get to.	☐
Prefer to buy books and records.	☐

Together these few questions should give you a basic picture of who uses the library and the reasons for non-use. It is possible to extend the survey in various ways. It may be useful, for example to ask people to describe the services which they would like the public library to offer.

If any of these services were provided by the public library would you use them?

	Yes	No
Space to study	☐	☐
Local information	☐	☐
Business information	☐	☐
Careers information	☐	☐
Photocopying	☐	☐
Records or tapes for borrowing.	☐	☐
Lectures	☐	☐
Story-telling	☐	☐
Children's activities	☐	☐

It is possible to extend the survey in other ways, but you should think carefully before doing this because every extra question you ask will increase the cost of the survey, it will add to the complexity of analysing the results and it will reduce the response rate. If you feel that you really do need the information it might be more sensible to consider using one of the Level Two measures to explore the subject in greater detail.

CONSUMER OPINION LEVEL ONE: BASIC USER SURVEY

Aims

- To identify who uses the library and what they use it for.
- To assess overall satisfaction with the library.
- To assess whether users get what they want during their visit to the library.
- To identify the services users most want the library to provide.

Notes

Whereas the community survey sampled all members of the community, here we are concentrating on the people who actually use the library. This information is intended to assess the extent to which people are satisfied by the service they receive. It is useful to explore the general level of satisfaction and, more precisely, how people felt about their most recent visit to the library.

The user survey also provides an opportunity to consult users about the range of services that could be offered by the library and to identify the ones that they most value.

Inevitably there will be some overlap between this survey and the basic community survey. You will, however, be reaching two entirely different groups of people through the surveys. For this reason, it may be justifiable to accept a degree of overlap.

Data collection

This information is, again, best collected by a brief questionnaire survey. This time, however, the survey will sample the users of the library on specific days. Most surveys of this type have been conducted on two complete working days - usually one week day and a weekend day.

There is no generally accepted way of distributing the questionnaires, the three methods used in the majority of earlier studies are:

- leaving supplies of the questionnaire in prominant places in the library, together with notices asking people to complete one before leaving the library.

- supplies of questionnaires and notices in the library together with a researcher at the library exit to collect completed questionnaire forms as people leave the library.

- researchers giving people a questionnaire as they enter the library and asking them to complete it as they leave.

Of these methods, the second and third provide much higher response rates - over 90 per cent as compared with about 25 per cent for the first method. They are, however, more time consuming and, therefore, more expensive. Experience suggests that at least two people would be required simply to hand out or collect the questionnaires.

One final hint, questionnaires printed on coloured paper seem to generate higher response rates than those on white paper.

Sample questions

As with the community survey, the basic user survey will collect information about the personal characteristics of respondents. The basic format will, therefore, be the same. See page 50.

It is usual to begin the user survey with a question designed to identify the reasons why people visited the library on the day being surveyed. For example:

For what reasons are you using the library on this visit?

- To return, renew or borrow books ☐
- To return, renew or borrow sound recordings. ☐
- To read a newspaper or magazine ☐
- To use the reference books ☐
- To ask for or find some information ☐
- To study using your own books ☐
- To study using the library's books ☐
- To browse ☐
- To visit an exhibition or a display ☐
- To attend a talk, story-telling or some other activity. ☐
- To use other facilities eg. photocopier ☐
- Other reasons (please write in).......... ☐

....

The actual range of replies will clearly need to reflect the services actually provided by the library.

Having established the reason for the visit, it is then possible to identify whether the user came to find a particular item or information. For example, you could ask an overall question for people using the lending services, such as

Did you come to the library today to look for a particular piece of information?	Yes	☐
	No	☐
If you did then please answer the following questions otherwise go on to Question *(insert number of next question)*		
Did you find the information you were looking for ?	Yes	☐
	No	☐
Did you ask the staff for help ?	Yes	☐
	No	☐
If you did <u>not</u> find the information you were looking for		
Did you ask the staff to find it for you and contact you later?	Yes	☐
	No	☐
Did the staff refer you to another organisation who may be able to help?	Yes	☐
	No	☐

All these questions will tell you whether users who visited the library with a specific purpose, succeeded in satisfying it. It is also possible to assess users' overall level of satisfaction in rather less precise terms.

Overall, how do you feel about your visit to the library today?

very satisfied	☐
quite satisfied	☐
neither satisfied nor dissatisfied	☐
fairly dissatisfied	☐
very dissatisfied	☐

Or, alternatively,

Did you come to the library today to borrow a particular book or record?	Yes	☐
	No	☐

If you **did** then please answer the following questions, otherwise go on to Question *(insert number of next question).*

Did you **find** the **book** or **record** you **were looking** for ?	Yes	☐
	No	☐
Did you **ask** the **staff** for **help** ?	Yes	☐
	No	☐

If you did **not** find the item you wanted, did you

Ask the staff to reserve it for you ?	☐
borrow something else instead ?	☐
leave without borrowing anything ?	☐

Or you may wish to ask a separate set of questions for different areas of the library stock, for example children's books, adult fiction, adult non-fiction or sound recordings. Only do so, however, if you really want to know about each area of the stock individually. As always, lengthening the questionnaire will increase costs and decrease the response rate.

The same question format can be used for people who visited the library to look for:

- a specific item of information
- a particular reference book
- specific books for study use in the library
- books by a particular author
- books in a specific subject area or language
- a particular newspaper or magazine
- sound recordings by a particular composer or performer.

You may wish to ask people for their general opinion of the library. To do this you could use a question like this:

Do you consider the services provided by this library are

Very good	☐
Good	☐
Average	☐
Poor	☐
Very poor	☐

This same format can be used to assess people's overall views of specific aspects of the service, such as: reference services; childrens services, or types of material.

To cover all of these in the basic user survey, would produce a very long questionnaire, which would be costly to administer, lengthy to complete and time consuming to analyse. It may be more sensible to consider exploring areas such as these by means of a checklist, one of the Level Two measures.

Level Two measures

A great deal can be learned from the two Level One measures - the community survey and the user survey. Even if the number of questions is limited, the amount of information generated can be considerable, and the results can provide a significant insight into the performance of the library service. For most purposes it will be sufficient to use only Level One measures.

There will, however, be times when it will be necessary to have a more detailed examination of consumer opinions. In such cases it is worth considering the use of one or more of the Level Two measures. These are essentially different ways of collecting information. The main Level Two measures are:

- Checklists
- Attitude surveys
- Depth interviews
- Group discussions
- Unobtrusive testing

The choice of method should be determined by the type of information required and the resources available to you. As with the Level One measures it is most important to start by specifying quite precisely what information you require and what you will do with it once you have collected it.

CONSUMER OPINION LEVEL TWO: CHECKLISTS

Aim

- To collect information about people's views or perceptions of the library service.

Notes

Checklists are generally used to supplement a user survey. In some circumstances they can be adopted to supplement a community survey. They provide a way of assessing user satisfaction with various aspects of the library service.

Data collection

As the name suggests, the information is collected by presenting a sample of people with a checklist of questions covering specific aspects of the service. The replies are coded on a five point scale ranging from very satisfactory to very unsatisfactory.

The checklist would include questions on the different categories of library stock; such as:

What are your views about the range of fiction books provided in this library?

Very satisfactory	☐
Quite satisfactory	☐
Neither satisfactory nor unsatisfactory	☐
Quite unsatisfactory	☐
Very unsatisfactory	☐

A similar format can be used for other aspects of the library service, such as the opening hours, the location of the library, the helpfulness of staff, the knowledge of staff, the availability and comfort of seating, etc. In such cases it may be necessary to adapt the responses offered. For example:

How convenient are the opening hours of this library for you?

- Very convenient ☐
- Quite convenient ☐
- Neither convenient nor inconvenient ☐
- Quite inconvenient ☐
- Very inconvenient ☐

Please say how you would like the opening hours changed.

....

Another way of designing a checklist is to ask people about their own priorities for the library. One way is to ask people to indicate which change would most increase their use or satisfaction:

Which one of the following changes would most increase your use of the library?

- Increased hours of opening ☐
- More books for adults ☐
- More books for children ☐
- More sound recordings ☐
- More study space ☐
- Better information services ☐
- Other (please specify) ☐

....

This list is, of course, only illustrative. The range of possible replies should reflect changes which could be made to the service.

A complementary question could ask people to indicate which aspects of the service they would first consider reducing if overall expenditure on the library had to be cut:

If decreased library funding forced reductions in the level of service, which of the following actions should be the first to be considered?

Reduced hours of opening	☐
Fewer new books for adults	☐
Fewer staff	☐
etc.	

CONSUMER OPINION LEVEL TWO: ATTITUDE SURVEYS

Aim

- To assess the attitudes of users and non-users to the library.

Notes

Attitude surveys are generally used to supplement community surveys. They provide a way of assessing the reasons why people fail to use libraries. They may also indicate aspects of the service which produce unfavourable attitudes.

Data collection

Attitude tests usually consist of a series of statements expressing favourable or unfavourable attitudes. Respondents are asked to indicate the extent to which they agree with these attitudes.

There are a number of methods for constructing attitude tests. The most commonly used are Likert scales where respondents are shown statements and asked to indicate the strength of their agreement on a five point scale ranging from **agree strongly** to **disagree strongly.**

Likert scales are the simplest to devise and to analyse. Even so scale construction is difficult, time-consuming and tedious. For this reason it is best to use a tried and tested scale.

One that has been used with some success in a number of surveys in Britain is reproduced below:

Note that the numbers indicate the extent to which the replies are favourable to the library with 5 being the most favourable.

The replies can be collated for each statement in turn giving an overall score and so indicating the aspects of the service which produce the most favourable and unfavourable attitudes amongst the community.

Replies can also be collated for each individual and compared to personal characteristics to see which groups in the community have the most favourable attitudes.

Please could you tell me if you agree or disagree with each of the following statements:
Please circle the appropriate number.

	Agree Strongly	Agree Slightly	Neither Agree nor Disagree	Disagree Slightly	Disagree Strongly
Libraries have too many rules and regulations	1	2	3	4	5
Libraries are attractive places to visit	5	4	3	2	1
Librarians are easily approachable	5	4	3	2	1
There should be more things going on in libraries than just lending books	5	4	3	2	1
Public libraries don't have the sort of books I like	1	2	3	4	5
It is easier to borrow books from friends than a library	1	2	3	4	5
Librarians are not very helpful	1	2	3	4	5
It would be a great loss to the community if there were no public libraries	5	4	3	2	1
It is not easy to find your way around in a library	1	2	3	4	5
Libraries should charge for lending books	1	2	3	4	5
Libraries are too quiet	1	2	3	4	5
Libraries provide a good service for the unemployed	5	4	3	2	1
I would expect a public library to be able to supply any information a businessman might need	5	4	3	2	1
I'm too busy to find time to read books	1	2	3	4	5
It is easy to get to a library whenever I want to	5	4	3	2	1
Libraries are too old-fashioned	1	2	3	4	5
The atmosphere in libraries is off-putting	1	2	3	4	5
Books are important in my life	5	4	3	2	1
Libraries should not charge for the loan of things like pictures or records or video tapes	5	4	3	2	1
Visiting a library regularly is too time-consuming	1	2	3	4	5
I'm not really interested in libraries	1	2	3	4	5

CONSUMER OPINION LEVEL TWO: DEPTH INTERVIEWS

Aim

- To probe and explore in detail people's views and attitudes towards the library.
- To probe and explore the reasons why some people do not use libraries.

Notes

Depth interviews can be used to supplement either a community or a user survey.

Data collection

The first stage is to select a sample of about 50 people from the respondents to the community or user survey.

The interview itself is generally quite unstructured, but would be based on an agreed list of initial questions. These would probe in more detail subjects like the image of the library or the nature of unexpressed needs for library services.

The less structure there is to an interview the more effort needs to be put into ensuring that the interviewer stays close to the point and is not drawn into interesting but irrelevant side-issues; that they record the information in an objective and consistent way; and that they cover all aspects of the problem. This obviously presents much less difficulty if the interviews are conducted by one person who can be relied upon to maintain a fair degree of consistency. Where a number of interviewers are used the schedule should contain clear and precise instructions and there should be a period of training to help everyone at least to begin in the same way.

CONSUMER OPINION LEVEL TWO: GROUP DISCUSSIONS

Aim

- To explore in detail attitudes towards and views of the library service.
- To explore in detail people's reasons for not using library services.

Notes

Like depth interviews these can be used to supplement community and user surveys. They provide an opportunity for people to share experience and to build up a thorough analysis of a topic.

Data collection

Group discussions are, quite simply, interviews carried out with a group of people rather than with individuals. The main advantage of group discussions is that they provide an opportunity for matters to be discussed in depth, with one person's views sparking off feelings and attitudes among others in the group. In this way it is possible to develop a much deeper understanding of people's attitudes and opinions.

Because a group is more difficult to handle than a single individual it is absolutely essential to have a fairly clear idea of the topics you wish the discussion to cover. In selecting these topics it should be remembered that the depth of the discussion means that it is usually impossible to cover more than three or four topics in any detail.

Having identified the topics to be explored, identify up to ten groups within the community. They might be members of a club, regular attendants at a community facility or members of an institution or society. Contact the leader or organiser and ask if it would be possible to hold a discussion about the library service with members of the group. Aim to have the discussion with about 8 to 10 people. Fewer than this does not provide a sufficiently wide range of opinion, many more makes the group too large to handle effectively. Keep users and non-users in separate discussion groups to provide a clear focus for the discussions.

At the discussion introduce the topics and try to get everyone to express their views. Try to avoid letting the group be swayed by the opinions of a single vocal member, and at all costs avoid letting your own views intrude. The task of the interviewer when conducting group discussions is difficult and it is necessary not only to ask the questions, to ensure that all matters are covered and that all responses are recorded but also to make sure that all members of the group participate equally. Aim for a meeting lasting about 45 minutes to an hour.

During the discussion you will be fully occupied in steering the discussion. It is simply not possible at the same time to note down all the points made. Either someone else must take the notes or the discussion should be tape recorded. If the discussion is recorded in this way, do not expect to produce a full transcription. Not only does everyone interrupt everyone else but it is usually impossible for someone who has not participated in the discussion, or who does not know the members of the group, to identify different voices consistently. Instead, plan to make detailed written notes from the recording and aim to do so as soon as possible after the discussion.

CONSUMER OPINION LEVEL TWO: UNOBTRUSIVE TESTING

Aim	• To assess the service provided by a library from the position of a library user.
Notes	Unobtrusive testing has been developed mainly to measure the performance of reference and information services. It could, however, be adapted to measure the performance of lending library services.
Data collection	In unobtrusive testing the researcher poses a question or range of questions to a library service. The library staff are unaware that they are dealing with a researcher and respond as they would to an ordinary member of the public. The choice of questions and the method for assessing the responses are both complex. Since this technique has been pioneered and developed by Tom Childers of Drexel University in Philadelphia. Anyone wishing to apply the technique is strongly recommended to read. [List of references to be inserted in the final draft]

Applying Level Two measures

As you have probably gathered by now, the Level Two measures of consumer opinion are quite complex. Before embarking on any of them you are strongly advised to consult people who have used them before, or at the very least to read some of the reports and studies referred to in the Bibliography. Remember that for most purposes the Level One measures will provide all the information you require.

CHAPTER SIX: ADAPTING THE MEASURES

It is impossible to produce a performance measurement manual which will be instantly applicable in public libraries throughout the world. Circumstances differ from community to community and public library services reflect that wide diversity. What this manual has attempted to do, therefore, is to provide generally applicable guidance which can assist librarians in the detailed development of performance measurement systems which are suited to local requirements. There is, therefore, a need to consider the guidelines in the light of the local situation and to make whatever adaptations and amendments seem necessary under the circumstances.

Such adaptation and modification could take place at national level. A body such as a library association could use this manual to produce a local version which could then be used by libraries throughout the country. This would involve modifying the terminology used in this manual; adapting locally acceptable definitions and adapting notes and instructions to suit local practices.

An important role for any organisation undertaking adaptation at national level would be to consider the extent to which it was possible to make use of existing statistical data. In many cases it should be possible to build on existing statistical exercises and in this way to avoid the need to collect data twice.

Finally the national body could agree details for specific measures. It could, for example, produce an agreed list of authors and subjects for the **Stock Capacity Measures** (see pages 42 and 44).

Where such national adaptation does not take place it will be necessary for local libraries wishing to use the manual to carry out their own modifications. There will be the same need to modify terminology, adopt local definitions and to adapt notes and instructions to suit local practices. Here it will be very important to try to fit in with existing routines and data collection exercises. It is possible to achieve considerable economies if existing statistics are used wherever possible.

Perhaps the most important thing for local librarians to consider is precisely what needs to be measured. It is very easy to consume a great deal of effort collecting performance measurement data for aspects of the service which are not considered to be important. Far better to concentrate on the high priority objectives and on the aspects of the service which consume most resources.

Local libraries will also be in a position to develop the Level Two measures to assess in greater detail specified aspects of the service. It is, however, recommended that libraries begin by using only Level One measures. This will provide an opportunity to set up systems and for everyone concerned to become familiar with the overall approach. Having collected a set of Level One measures it will become much easier to see how best to develop the Level Two measures.

Case studies

One valuable role which could be played by a national library association would be to encourage the manual to be used in a number of case study libraries. This would provide a sound basis for adopting the measures, defining terms and so on.

Such case studies would also provide some initial results against which other libraries could compare their results.

CHAPTER SEVEN: INTERPRETING THE RESULTS

When interpreting the results obtained from using this manual it is important to remember a point we made in the beginning. Performance measurement should be seen as part of the overall management information system of the library. The information obtained from applying the performance measures provides valuable information but it should be seen within an overall context of management information and should not be regarded as an end in itself.

The aim of performance measurement is to indicate the current progress of the library; to provide a means of assessing the efficiency with which resources are being used, and to provide a basis for relating performance to the overall objectives of the service.

From the outset, it is important to recognise that there are no absolute or right measures. Performance of a public library depends on the nature of the community served by the library, the nature and scale of the resources provided for that library service and, finally, on the objectives within which the service is developed. Because of this the actual results will differ from one library to another. Also the significance of the measures will vary according to the objectives of the service. Some libraries, for example, give a high priority to their reference and information work. In such cases measures of reference transactions, and so on will be particularly important. Other libraries place a higher priority on their lending service and in such cases measures of the lending bookstock and the use of the lending service will be more important.

It is, therefore, very difficult to provide hard and fast interpretations of the results that will be relevant in more than one country. What is much more important is the comparative use of the results. Knowing, for example, that 28% of the bookstock in Library A is on loan at any one time is of relatively little value. If, however, we compare that result with figures of 40% and 45% in Libraries B and C we begin to understand a little more. If we also know that the figure this year is 28%, but that last year it was 35% and in the year before, 40% then we can safely conclude that something fairly significant is happening in that library. The essence of performance measurement is comparison. Comparison over time, comparison between libraries in the same library system and comparison between library systems.

The other important thing to note is that the measures should not be considered in isolation. The results should together build up to form an overall picture of what is happening to the library. In the example given above, it would be necessary to look also at figures for the total bookstock, the number of books on the shelves, the levels of loans, visits and active use and at measures like the author and title success rate. Only by looking at all these results together will it be possible to form an overall picture of what is happening and why.

The rest of this chapter takes each of the measures in turn and indicates the sort of results that might be expected and suggests how they might be interpreted.

Measures of resources

Bookstock

The measures of books in stock were:

- Books on the shelves per 1000 population
- Total books in stock per 1000 population
- Percentage of stock on loan

The number of books on the shelves per 1000 population will vary enormously from country to country. The figure will depend on a wide range of factors including things such as the size of the library buildings and past levels of expenditure and use. A well-resourced library might expect to have between 1500 and 2000 books on the shelves per 1000 population. Shelf stocks which are much higher than this often indicate that the stock is not being used very intensively and consequently users are always selecting from a stock which changes relatively little. Equally, shelf stocks which fall significantly below 1500 books per 1000 population cannot really offer users the necessary range of choice.

When considering the number of books on loan per 1000 population it is important to remember that, within any community, there is a limit to the number of books that people will borrow. Few public libraries managed to have more than 30% of their community in active membership of the library. Further, few active users have more than three books on loan at any one time. This means that within any 1000 people a maximum of 300 of them will be using the library at any one time and, if they are using the library intensively they will probably have, on average, three books on loan each.

In other words, if a library has about 900 books on loan per 1000 population it is probably operating at full capacity.

When it comes to the total number of books in stock the IFLA **Standards for Public Libraries** recommend about 3000 books per 1000 population for the total bookstock.

Putting these figures together we can see that if more than 30% of books are on loan at any one time, the stock is being used very heavily. If, on the other hand, fewer than 10% of the stock is on loan then it probably means that the turnover of items on the shelf is relatively slow and the library's users will be presented with much the same choice to select from on each visit to the library.

Additions and exchanges

The measures of a library's additions and exchanges are:

- Annual expenditure on additions per 1000 population
- Annual additions to stock per 1000 population
- Annual exchanges per 1000 population

All measures of expenditure will vary from year to year, according to the rate of inflation, and from country to country. When comparing levels of expenditure, therefore, it is important to make sure the comparison is done simply within countries and over the same time periods.

The IFLA **Standards** recommend that libraries should plan to add about 250 new books to stock per 1000 population each year. This seems reasonable as a target to aim for but, it should be remembered that the figure needs to be interpreted in the light of the pattern of publishing within different countries. In some countries, such as Britain and North America there is a very large local publishing industry producing many thousands of new titles each year. To provide an acceptable selection of that current publishing output it may be necessary to purchase more than 250 new books each year. In other countries where the local publishing industry is not so prolific it may well be acceptable to purchase a smaller number of books each year.

The rate and number of exchanges will vary very considerably according to the nature of the library services. Libraries serving dense urban areas, for example, will require a much lower rate of exchange than will small libraries in rural areas.

Live stock turnover rate

The aim of this measure is to show the rate at which the stock is being refreshed or replaced by the addition of new and exchanged books.

Most libraries aim to achieve a balance between getting the full use out of each book while at the same time having a current and lively stock. The longer a book stays in the library, the more likely it is to achieve its full potential use. At the same time the longer books stay in the libraries the less current is the stock and it will appear less attractive to many of the users.

A live stock turnover rate of 10 would be acceptable. This would mean that the average age of books was five years. It should, however, be remembered that new books are borrowed more intensively than old books so if the average age of the total stock is 5 years then the average age of books on the shelves is likely to be 8 or 9 years.

A live sto turnover rate of 7 would ensure that there is a higher proportion of newly published material available for people to select from but it also may mean that books were not achieving their full potential use before they were discarded.

Periodicals

The measures for periodical resources are:

- Annual expenditure on periodicals per 1000 population
- Periodical titles received per 1000 population

Again, expenditure levels will vary over time and from one country to another. In terms of the number of titles received per 1000 population, the IFLA **Standards** recommend a basic provision of at least 50 periodicals or 10 periodicals per 1000 population.

Sound recordings, video recordings, pictures and other materials

The levels of stock per 1000 population for these items will vary very significantly according to the practice within different countries and the objectives of particular library services.

Staff resources
Total staff

The measures of the staff resource are:

- Annual expenditure on staff per 1000 population
- Population served per member of staff

Again the IFLA **Standards** provides some guidance on what to expect here. Broadly, the **Standards** recommend a staffing level of one member of staff for every 2500 members of the population. This provides a general indicator against which local performance can be assessed. It should, however, be remembered that staffing practices vary from country to country and that the staffing requirement can also vary significantly according to the size of the service point. Small libraries, for example, may need more than one member of staff per 2500 population simply to meet the requirement to keep the building open for an acceptable number of hours each week.

Professional and para-professional staff

The measures here are:

- The percentage of staff with professional qualifications
- The percentage of staff with para-professional library qualifications.

Again, staffing arrangements vary considerably from one country to another. The IFLA **Standards** recommend that between 33% and 40% of staff should be professionally qualified. Whether or not this proportion includes para-professional staff will depend almost entirely on local circumstances.

Building resources
Size of buildings

Here the measure is quite simply the floor area per 1000 population. This is one of the measures which is likely to vary significantly from country to country depending upon the nature of the service provided by the public library. It is very hard to indicate what expected results might be. Based on the IFLA **Standards**, however, a range of between 20 and 25 square metres per 1000 population would probably indicate adequate provision of library buildings.

Opening hours

There are two measures for assessing the opening hours of a library:

- The total number of hours open each week
- The percentage of opening hours which fall outside local business hours.

The intention is to show not only how long the library is open but also to indicate the availability to those who are working during the day.

Again, the results need to be interpreted with some care. In small communities it is simply not economic to keep library buildings open for a large number of hours each week. On the other hand, in dense urban areas, the failure to keep buildings open for large numbers of hours each week may mean that a community asset is not used to its full potential. In libraries serving more than 8000 people it would be reasonable to expect the library to be open for at least 50 or 60 hours each week with probably 30% of those opening hours falling outside the local business hours.

Accessibility

Here we are trying to measure the ease with which people can get to a library service point. This can be quite an important measure as research has shown that library use drops off very rapidly the further people have to travel to the library service point. The measure used here is:

- The percentage of the population who live more than 2 kilometres from a library or more than 1 kilometre from a mobile library.

Again, library use patterns vary from country to country and even within different countries. In Britain, for example, various pieces of research have shown that over half the users of public libraries travel less than 2 kilometres to visit the library. The implication of this is that people living outside that 2 kilometre radius are much much less likely to make use of the library facility. It would be reasonable, therefore, for libraries in the British context to aim for a situation where 70% or 80% of the population lived within 2 kilometres of a library service point or 1 kilometre of a mobile library. In other countries, however, particularly those which are less densely populated, such proportions may well be unrealistically high.

Measures of outputs
Loans

The measures here are:

- Annual loans per 1000 population
- Circulation rate

The extent to which people borrow books to read them at home is determined by a wide range of factors, many of which depend on the general cultural tradition of the country. There is a theory, for example, that the rate of lending use of libraries varies indirect proportion to the distance from the Equator. Countries near the Equator tend to have a culture which involves spending considerable amounts of time out of doors, frequently participating in group activities. Such behaviour patterns do not lend themselves easily to the relatively solitary pursuit of reading. In contrast, countries with long, cold winters encourage people to spend time at home where reading is a more culturally acceptable activity. Even if the theory is invalid, we should recognise that patterns of lending vary very considerably from one country to another. Another determinant of lending use will be the overall rate of literacy within the country. If only half the community served have levels of literacy which enable them to read easily the materials stocked by the library then the number of loans per 1000 population is going to be significantly different. In such circumstances it may indeed be unreasonable to have lending books as a priority objective for the library service.

In some countries libraries might aim to achieve 10,000 loans per 1000 population each year. In other countries a library may be doing very well to achieve half this figure. The important thing is to compare performance over time and with that of other libraries and to ask why variations occur.

The circulation rate is quite simply the number of times, on average, a book was borrowed during the year in question. This provides a measure of the rate at which books are being used in the library. It would be reasonable to aim for a circulation rate of about 5. If the circulation rate is much more than this it means that the library is being used very intensively indeed. Either that or the total stock is not sufficiently large to sustain the level of use it is receiving. To check this it is necessary to go back and relate the circulation rate measures to the total stock measures. On the other hand, a circulation rate much below 5 indicates that the stock is not being used very intensively, or that the total stock is large in relation to the use being made of it. An implication of this is that the stock on the shelves will not change very much from month to month and users, when they visit the library, will tend to see the same selection of books over and over again. Another way to look at it is to ask the question how long do books stay on the shelves between loans? If the circulation rate is 3 and the loan period is 4 weeks the books will spend, on average, about 13 weeks on the shelves between loans. This does not present users with much variation in the choice of books available to them.

Visits

Here we are trying, quite simply, to measure the number of visits made to the library each year per 1000 population.

The result of this measure will vary enormously from country to country and library to library. The number of visits made will vary according to the nature of the use made of the library, the emphasis given to activities such as displays, exhibitions, and so on and to the location of the library within the community. It is very difficult indeed, therefore, to give an internationally valid indication of the sort of results to expect from this measure.

Active users

Here we are trying to measure the number of people in the community who are actually making use of the library. The measure we have chosen is the percentage of the population who have books on loan.

This is of limited value as it fails to take direct account of those who use the library for purposes other than borrowing books. It is, however, a useful indicator of the approximate volume of use and it should indicate whether use is increasing or decreasing from year to year.

Again, rates of active use will vary considerably from country to country in developed countries with a well-resourced pattern of public library services it might be possible to find that as many as 25% of the population were actively using the library in the sense that they had books on loan at any one time. In other countries the figure may be as low as 5%.

The significance of this measure will depend, for obvious reasons, on the priority given to the lending service within the library's overall objectives.

Activity attendance

Here the objective is to measure the number of people, per 1000 population, who attend activities provided by the library service. The results of this measure will obviously vary considerably according to the scale of the activities arranged by the library. Further, just as with the measure of active users, the significance of the activity attendance measure will vary according to the objectives of the library service.

Reference and information transactions

Here the intention is to measure the volume and nature of the use made of the reference library. The measures used are:

- The number of visits to the reference library per 1000 population.

- The number of transactions per 1000 population.

In this way the measures attempt to take account of those who use the reference library on a self-service basis and those who involve the library staff in their use of the service.

This is another of the areas where the results will vary considerably from country to country according to the priority given to the provision of reference and information services. It is also likely to vary considerably with the actual size of the library itself. Reference and information services tend to be concentrated in larger central libraries and higher levels of use should, therefore, be expected from these service points compared with perhaps those in small rural areas.

Stock capacity

Here the measures are aiming to show the capacity of the stock to satisfy the demands of library users. In particular the measures assess the ability of the stock to satisfy the demand for specific authors and for books on specific subjects. In addition to finding books on specific subjects and by specific authors, library users should be able to find an acceptable selection of recently published material. The measures also, therefore attempt to assess the age of the stock on the shelves. The specific measures are:

- Author success rate

- Subject success rate

- Percentage of stock published in the last two years

- Percentage of stock published in the last five years

With the author success rate the results will obviously depend on the nature of the authors chosen and the average number of titles they have produced. If the library is using a list of 20 popular authors who have published, on average, 5 titles each then it would be reasonable to expect the library to be able to offer its users an average of 3 titles by each author to select from. If, on the other hand, the authors had produced an average of 10 titles each then the library should be able to offer a choice of 5 or 6 titles, on average, per author.

Similarly with the subject success rate the library should be able to offer 2 or 3 titles for each subject. Obviously, however, the number of titles available will vary according to the breadth of the subject.

What these measures are really trying to do is to answer the question which is in the minds of most library users when they enter the library, that is "what are my chances of finding something that I am looking for on this visit to the library?"

An important dimension is the age and currency of the stock from which the users make their choice. It has been clearly established by research that new books are borrowed more frequently than old books. Consequently, a high proportion of new books is likely to be on loan whereas a high proportion of old books is likely to be on the shelves. Because of this, library users are likely to be presented with a choice of books which has an average age greater than that of the overall stock.

In most libraries it would be reasonable to expect 10% of the shelf stock to have been published during the last 2 years. Similarly, it would be reasonable to expect 40% to have been published in the last 5 years. Proportions that are much smaller than this are likely to indicate a stock with a relatively low turnover rate.

Requests and reservations

Libraries can never expect to meet all their users' demands from the material available on the shelf. To overcome this, most public libraries offer a request and reservation service whereby they obtain material on demand for their users. The aim of this measure is to indicate the library's ability to meet quickly demands for material which is not readily available and, in particular, to show the likelihood of requested material being ready for collection on the next or next-but-one visit. The specific measures are:

- The percentage of requests satisfied in 2 weeks
- The percentage of requests satisfied in 4 weeks

This is another of the measures that will vary significantly from country to country and it will depend to a very great extent on matters such as the network of libraries and the communication links which can be used to satisfy requests and reservations. It would be reasonable to expect to meet 25% of requests within 2 weeks and 50% within 4 weeks. If it takes longer than this there is no great incentive on the part of the users to request or reserve material.

Putting the results together

We have seen that, by running through each of the measures in turn, it is possible to combine different measures to provide a richer picture of what is happening in the library. This needs to be done in a number of different ways.

Firstly, certain measures relate directly to each other. The proportion of books on the shelves published within the last two years, for example, is determined directly by the live stock turnover rate which is in turn determined by the size of the total bookstock and the rates of additions and exchanges.

Secondly, it may be possible to put results from one set of measures together with the results from another set in order to discover why certain things are happening in the library. This may often be the case when drawing on the results of the surveys of consumer opinion. A low rate of activity attendance, for example, may well be caused by a general lack of awareness amongst the community that the library offers such activities.

Thirdly, and perhaps most important, the results from the measures need to be related back all the time to the objectives of the library. If the library gives a high priority to providing a reference and information service, then it should expect to have a high number of reference and information transactions. Similarly, if the library service has been developed on the basis of small service points with small bookstocks backed up by a request and reservation service then it should aim to satisfy a high proportion of requests and reservations within 2 or 4 weeks.

Making use of the results

The final point to make in this chapter is that the measurement of a library's performance is not an end in itself. Performance measurement, as we have noted, forms part of the library's overall management information system. The results of the performance measurement exercise should provide the basis for answering two important management questions:

- Is the library using its resources efficiently?
- Is the library being effective in achieving its objectives?

It is important to emphasise that once the performance has been measured some attempt should be made to address these two questions. The mechanism for doing so will obviously vary from library to library but the process itself should not be ignored.

CHAPTER EIGHT: BIBLIOGRAPHY

There is an enormous literature on the subject of performance measurement and its application to public libraries. This literature has been characterised by initial theoretical work which has established basic principles and which has then been followed up by the development of more practical guidelines and processes. What this bibliography attempts to do is quite simply to provide an indication of the most useful key sources. For those wishing to take things further a more thorough review appeared recently in the **Journal of Librarianship** (Goodall, Deborah L. Performance measurement: a historical perspective. **Journal of Librarianship**, 20(2) April 1988 128-144).

Output measures for public libraries: a manual of standardised procedures. (Second edition) Chicago, American Library Association. 1987

> This is an excellent starting point for anyone wishing to develop their understanding of performance measurement in public libraries. The manual was prepared for the Public Library Association of the American Library Association by a team consisting of Nancy Van House, Mary Jo Lynch, Charles McClure, Douglas Zweizig and Eleanor Jo Rodger. As such, it has been prepared by five of the most experienced people working in this field and draws on the practical experience gained from applying the first edition of the manual. The approach adopted in this Unesco/IFLA manual is similar to that adopted in **Output Measures for Public Libraries** although there are significant differences in certain areas.

Output Measures for Public Libraries sets the standard for all other work in this field.

National Consumer Council. **Measuring up. Paper 3, Public Libraries.** London, National Consumer Council 1986

The value of this publication is the work was carried out as part of a bigger project looking at ways of measuring the performance of a wide range of public services. A range of output measures similar to those used in this manual were tested in a number of public libraries and the results have been used in this publication to provide a basis for considering the whole question of performance measurement.

Morse, P M. **Library effectiveness: a systems approach.** Cambridge, Mass. MIT Press. 1968

This is often referred to as the starting point for the development of performance measurement in public libraries. It has certainly been a seminal work but it is fairly technical and offers relatively little direct practical guidance to people wishing to use performance measures on a day-to-day basis.

De Prospo, E Altman, E and Beasley, K. **Performance Measures for Public Libraries.** Chicago. American Library Association. 1973

This was perhaps the first stage in the lengthy involvement of the Public Library Association and the American Library Association to develop performance or output measures for public libraries. Coming 5 years after the publication of Morse's work this attempted to apply the techniques to public libraries in a way in which they could be used by public librarians with no previous research experience. The publication is particularly important as it clearly identifies the need to view measures from the perspective of the user.

Childers, T. The test of reference. **Library Journal.** April 1980 924-928

Tom Childers is well known for his work on unobtrusive testing of public reference library services. In this article he sets out to describe how such tests can be carried out and sets down some basic principles.

Lancaster, F Wilfrid. **The Measurement and Evaluation of Library Services.** Arlington, Va. Information Resources Press. 1977

This provides a very good review of the various techniques which have been developed over the years for measuring and evaluating library services of all kinds.

Data collection methods which have been used in a variety of library surveys.

Moore N. **How to do research.** (Second edition). London. Library Association 1988

This is a very basic text written for practising librarians who are about to embark on a research project. It provides practical help and guidance for those unfamiliar with research.

Loughborough. Loughborough University, Centre for Library and Information Management. 1982

For those who want to take the whole study much further this bibliography, containing over 200 items, gives you all you need to know about the literature of Performance Measurement. It was produced in conjunction with the Public Libraries Research Group which has a long tradition of involvement with performance measurement. The bibliography is effectively up-dated by the article by Deborah Goodall which is referred to at the beginning of this chapter.

CHAPTER NINE: GLOSSARY

Activities

Events organised by the public library service. Sometimes referred to as extension activities. Examples include story-telling sessions, poetry readings, lectures, concerts, workshops and seminars.

Additions

Additions are the new materials which are purchased and added to the stock of the library. It is normal to refer to the number of additions per annum, that is the number of new items which are purchased and acquired by the library during the course of a year. (See also **Books** and **Exchanges**).

Attitude surveys

Surveys which attempt to identify people's attitudes towards library services. Such surveys usually make use of scales which measure the strengths of people's likes and dislikes. A Level Two **subjective performance measure.**

Books

Books are the main category of materials stocked by public libraries. The definition of a book varies from country to country and local practice should be adopted. In general do not count as books pamphlets, which are usually regarded as items having less than 50 pages. Also do not count periodicals which are items published in a regular series. (See also **Additions, Exchanges, On loan** and **On shelves**).

Branch libraries

A branch library is a part of a **Library System** from which a direct service is given to the public. Branch libraries are normally static, as opposed to mobile libraries. In some **Library Systems** there will also be a **Central Library** which normally provides a wider range of services than do the branch libraries. (See also **Library System** and **Central Libraries**).

Catchment area

The catchment area is the area from which the library draws its users. It is sometimes referred to as the community served by the library.

Catchment population

The catchment population is the number of people who live in the library's catchment area.

Central libraries

The main library within a **Library System** which usually provides a wider range of services than do **Branch Libraries**. (See also **Branch Libraries** and **Library Systems**).

Checklists

A method for obtaining information about people's views or perceptions of the library service. A Level Two **subjective performance measure.**

Community surveys

Surveys of the community as a whole. They collect information from users and non-users of the library service. One of the basic ways of collecting information about **subjective performance measures** at Level One.

Consumer requirements

The term consumer requirements is used to describe the **Needs, Demands** and **Wants** of the people living in the community served by the public library. (See also **Demands, Needs** and **Wants**).

Demands

Demands are an aspect of **Consumer requirements.** Demands exist when consumers express theii **Wants** or requirements for library service. (See also **Consumer requirements, Needs** and **Wants**).

Depth interviews

Fairly lengthy and detailed interviews with individuals. Such interviews allow you to explore particular issues in some detail. A Level Two **subjective performance measure.**

Effectiveness

The effectivess of a library is defined as the extent to which it is able to achieve its **Objectives.** (See also **Objectives** and **Outputs**).

Efficiency

Efficiency is the measure of the extent to which a library can produce **Outputs** within a given level of **Resources.** Efficiency is said to increase if a higher level of **Outputs** is produced for the same level of **Resources**, or if the same level of **Outputs** is produced using fewer **Resources.** Another term which is frequently used is **Productivity.** (See also **Outputs** and **Resources**).

Exchanges

Exchanges are materials which are transferred from one library to another. As such they represent an additional item in the stock of the library which receives the exchange. Exchanges, however, need to be distinguished from **Additions** which are items which have been newly purchased for the **Library System.** (See also **Additions** and **Books**).

Full-time-equivalent

Full-time-equivalent is a means of expressing in a consistent way the number of part-time staff employed. A full-time-equivalent is normally calculated by adding together the weekly hours worked by all part-timers and dividing the total by the number of hours worked each week by a full-time member of staff.

Objectives

The objectives of a library service describe what that service is trying to achieve. Objectives should reflect **Consumer requirements.** By assessing **Outputs** against the objectives it is possible to measure the **Effectiveness** of the service. (See also **Consumer requirements, Effectiveness** and **Outputs**).

Objective performance measures

Performance measures which rely on the use of statistical information about resources and outputs. See also **subjective performance measures.**

On loan

Material which is on loan has been borrowed by **Library users** and is thus not currently available to be borrowed by other users.

On shelves

Material on the shelves of a library is ready and available for use. The term **On shelves** is therefore used to distinguish material which is available for use in this way from material which is **On loan** or not readily available because it is stored on shelves which are not easily accessible to the public.

Other materials

Books are the most commonly found materials in libraries. Nearly all libraries, however, stock other materials either for loan or for reference. These other materials can include **Pictures, Periodicals, Sound recordings** and **Video recordings.** (See also **Pictures, Periodicals, Sound recordings** and **Video recordings**).

Output

The output is what is produced by a library system from the **Resources** it employs. In a general sense the output may be thought of as being equivalent to the use made of the service. (See also **Effectiveness, Efficiency, Objectives** and **Resources**).

Group discussions

Intensive discussions held with groups of about 8 or 10 people to explore in detail their feelings about the library service. The interaction within the group usually makes it possible to obtain a very thorough view of the topic under discussion. A Level Two **subjective performance measure.**

Level One Measures

These are the performance measures which can be used at national level or for general comparisons of libraries. They relate to the main indicators of library performance.

Level Two Measures

Level Two measures are more detailed performance measures which are used in the context of individual libraries and which need to be designed to suit the particular requirements of those libraries and in particular they need to conform to the overall objectives of the library service.

Library Systems

A library system is the network of provision of public library services operating under a single, unified management structure and providing services within a clearly defined administrative area. Library systems have their own governing bodies, receive and manage their own funds and appoint their own staff. (See also **Branch Libraries** and **Central Libraries**).

Library User

A library user is, quite simply, a member of the community served by a library who actually makes use of the library facilities. It is not always necessary to be a member of a library to be a library user.

Needs

Needs are the things which people require of a library service. Needs are frequently unconscious and as such need to be distinguished from **Wants** which are conscious desires on the part of individuals within the community. (See also **Consumer requirements, Demands** and **Wants**).

Para-professional staff

Para-professional staff are staff who have received a formal training in librarianship or information work, but who have not reached the level expected of a professional. They are library technicians and technical assistants who apply library related skills to one or more of the functional areas of library operations for the purpose of supporting and assisting the professional staff.

Periodicals

Periodicals are materials which are published in a series at regular intervals. They include newspapers.

Pictures

Pictures are stocked by some libraries for loan. They may include maps, wallcharts, posters and items of original art.

Productivity

See **Efficiency.**

Professional staff

Professional staff are staff who have a qualification in librarianship or information work. The qualification will normally have been obtained as a result of education at postgraduate or undergraduate level. Most professional staff will be eligible for membership of a professional association.

Reference and information transactions

A reference or information transaction occurs when a **Library user** asks a member of the library staff for information or for assistance with a reference query. The active involvement of a member of the library staff is an essential feature of a reference and information transaction.

Requests

A request is an individual demand made by a **Library user** for a book or for some other item of library material. Requests are normally for material to be borrowed, although some requests are for reference material. A **Reservation** is another item for a request.

Reservations

See **Requests.**

Reserve stock

The reserve stock of a library is the store of material which is used to supplement the material **On shelves.** Reserve stocks are not normally accessible to members of the public.

Resources

The resources are the inputs to the **Library System.** The three main resources are books and other materials, staff and buildings. Other resources used by **Library Systems** include vehicles, display materials, equipment and services such as telecommunications.

Sound recordings

Recordings of music, speech, or sound effects held on disc or tape. Such sound recordings may be available for loan or for reference.

Subjective performance measures

Performance measures which rely on the analysis of information about the opinions of consumers. Level One measures are compiled through the use of two basic surveys - a **community survey** and a **user survey.** Level Two measures require more sophisticated techniques, such as **checklists, attitude surveys, depth interviews, group discussions** and **unobtrusive testing.**

Unobtrusive testing

A method of collecting information about performance. The researcher pretends to be a user and experiences the service as a user would. The technique has been used successfully to measure the performance of reference and information services. A Level Two **subjective performance measure.**

User surveys

Surveys which are restricted to the users of the library service. The main purpose of user surveys is to measure people's level of satisfaction with the service they receive. A Level One **subjective performance measure.**

Video recordings

Sound and vision recordings held on cassette or disc. Again, such recordings may be available for loan or just for reference.

Wants

Wants are a conscious form of **Consumer requirements** held by members of the community served by the library. Wants are conscious and should be distinguished from **Needs** which may be unconscious. (See also **Consumer requirements, Demands** and **Needs**).