DRTC Seminar (11)(1974). Paper E.

STANDARDS FOR USE IN THE PLANNING OF LIBRARY AND DOCU-MENTATION SYSTEMS: COMPARATIVE DATA PROM INDIA, UK, USA, and CANADA.

M A GOPINATH, <u>Documentation Research</u>, and <u>Training Centre Indian Statistical Institute</u>, <u>Bangalore 56003</u>.

Standards for library work and service form an essential base for planning of library and documentation systems. Areas amenable for standardization are mentioned. Forms of standardisation, methods of setting up standards, impediments for performance standards are presented. Some important standards for the provision of library staff on the basis of library stock, current acquisition rate, number of readers to be served and financial provision in different countries, are given. Suggests a conscious utilisation of techniques in work study, time study and the principles of ergnomics for the development of performance standards. Planning of library and documentation systems can be made more reliable if we have a well tested performance standards.

1 LIBRARY STANDARDS

Scientific management of library work and service have led to the formulation and establishment of standards for library work and service. For brevity, we shall be using the term 'Library standard' to denote standards for library work and service. This also includes standards needed for documentation work and service. Library standards are helpful in planning, instructing, implementing, testing and controlling any area of activity in the fields of library work and service. This has been clearly expressed in the

for South African .Public Introduction, to,Standard Libraries (35) which says, Library standards may be defined as the criteria by which ... library services may be measured and assessed. They are determined by professional librarians in order to attain and maintain the objectives they have set themselves. Standards cay be interpreted variously as the pattern of an ideal, a model procedure, a measure for appraisal, a stimulus for the future development and improvement, and instrument to assist decision and action not only to librarians themselves, but by laymen concerned indirectly with the institution's planning and administration of library services. The adoption of it does not imply a loss of individuality, a curb to initiative or a pattern to • which all ... library development must con-Library standards evolved in a systematic manner only after the second world war. And professional library associations, government departments and standardo institutions are promoting the formulation of library standards.

2 STANDARDS FOR PLANNING OF LIBRARY SYSTEMS

Library standards provide an essential base for planning of library services. They provide a unit of measurement for a particular work or service. Therefore, establishing library standards has become an important prerequisite for the planning process. Performance standards usually (1) provide on objective basis for decision making; (2) aid the equitable distribution of work while delegating responsibility; (3) provide an objective test for the measurement of effectiveness of different methods of doing a work, or of solving a problem; (4) provide a basic guideline for manpower

planning; '(5) provide a unit of measurement for cost and time analysis technique; (6) provide a means for work simplification and thereby increase productivity; and (7) promote faster and precise communication of ideas among librarians and library planners.

3 AREAS FOR LIBRARY STANDARDS

Most of the library work is of a repetitive and • routine type. It has been estimated that 60 per cent of all library work is quantifiable. However, certain professional activities such as book selection and reference service will continue to defy precise measurement and quantification, and therefore ore out of bounds for standardization. The different areas amenable for standardization are as follows;

- 1 Document stock;
- 2 Technical processing;
- 3 Library manpower recquirement;
- 4 Financial provision
- 5 Library housing (including such items as location, layout, windows, end physical amenities sarvice in respect of library building such as unit racks, bay-guides, books trolley, etc);
 - 6 Library form design; end
 - 7 Library catalogue dssirn.

However, the various standards relating to library building and furnithre, library form design, library catalogue design, have been left out of discussion in this paper.

4 FORMS OF STANDARDISATION

Standardisation may be either of the following forms: One is specification. The other is the guiding

principle. Specification stipulates dimensions and other qualities of a product or a commodity, such as a book, a catalogue card, etc. Majority of library standards are in the form of guidelines, which give a set of models or patterns as norms for library work and service. They are usually flexible and are adaptable to different contexts and national and regional environments.

5 METHODS OF SETTING STANDARDS

There are several different ways of establishing standards. They may be based on the production statistics of past performance, work sampling data, time study data, standard time data, or by subjective However, different methods of setting stanmeasures. dards may have different margins of tolerance. Judgment will have to be exercised in choosing the appropriate method for setting up standards for different areas of library work and service. Before sotting up stewards, the units of work measurement must be identified, defined and standardised. Some of the familiar work units in library work and servic« are: Document, Reader, Catalogue Card, Reference Questions asked, and items of bibliographical details, etc. The standards for technical services can be expressed as norms in teres of time and units of work accepted by general consent as a reasonable performance by an experienced libraries/ documentalist. A majority of library standards prevalent now are arrived at by consensus of opinions and estimations.

6 PERFORMANCE STANDARDS AND FORKING CONDITIONS

Performance standards vary with different working conditions, environments, and other facilities. The

types of constraints that can affect performance can be seen from a case study done by C B Clapp (6) in respect of cataloguing. According to him, the following conditions could contribute to the poor performance of a cataloguer:

- 1 Poor equipment;
- 2 Great distance between points within the scope of every-day activities;
 - 3 Lack of access to reference tools;
 - 4 Toleration of disorderliness:
 - 5 Use of caustic criticism;
- 6 Inadequate cooperation by superiors and coordinating departments in furnishing information or making decisions;
 - 7 Improper assignment of duties;
- 8 Neglect of possibilities of U3ing low-priced people on some work;
- 9 Want of a simple system of dealing with portions of the material coming for cataloguing;
- 10 Too much application of maximum, instead of minimum, standards of treatment in classifying, cataloguing, shelf listing end marking:
- 11 Failure to discriminate between the permanent and the temporary, and between the pristine and the already indexed and described,
 - 12 Over-meticulousness in unimportant matters;
 - 13 Inability to place reliance on others;
 - 14 UnadEptiveness to new work or methods; and
 - 15 Slowing down in boring assignments.

Therefore, the performance standards should be formulated for each situation, bearing in mind the various facilities provided. The professional bodies in different countries should formulate only broad

guidelines in respect of the performance for professional work. Even when standards are developed within an organisation, they should not be expressed in fixed quantities, but should be in the form of minimal and maximum ranges, Weightage should also be given to flexibility in the application of standards of performance.

7 SOME PROFESSIONAL PERFORMANCE STANDARDS

Since manpower planning and manpower raising have become very important in the context of library and documentation services, several attempts have been made in developing standards for performance. In the succeeding sections, some of the performance standards generally prevalent in the countries such as India, UK, USAi and Canada, are presented. These standards are expressed in terms of document stock and acquisition rote, number of readers to be served, and finance.

71 India

Ranganathars was a pioneer in the field of Performance Standards in India. As early as 1938, he made a systematic one exhaustive study of library work and library service. His book library Administration (1938; Ed 2, 1957) contains systematic work, job analysis, and routine. On the basis of this analysis, he formulated his famous staff formula. This has been used both in specialist library as well as in a university or a college library.

711 Specialist Library

The staff formula which was explicitly formulated by Ranganathan in 1943, has been tested in several

libraries in India. The fomula is based on the following units of measurement:

- 1 The number of documents taken in per annum;
- 2 The total number of documents stocked in the library; and
 - 3 The number of readers to be served.

The following table gives a staff formula for professionals besed on the recommendations by the University Grants Commission, with necessary modifications

SN	fork		
	Section	Annual Quantum for One Person	
1	Book Section	6,000 volumes annually added	
2	Periodicals Section	1,500 periodicals received	
3	Technical Section (Clssification,		
	Cataloguing, etc)	2,000 volumes annually added	
4	Reference Section	50 readers in a day	
5	Documentation Section	Each of the services offered requires 1.5 man-years on an average	
6	Circulation Section	1,500 hours; circulation counter is kept open	
7	Supervisory staff	1 Chief Librarian, and 2 Head of Unit	

This standard formula provides a general guideline. This fornula is used in all the plans drafted by the Documentation Research and Training Centre.

712 <u>University and College Libraries</u>

Ranganathan has recommended, in addition to the staff formula given in Sec 711, the following standards for university end college libraries.

1 <u>Document Stock</u> Desirable ceiling: 400,000.				
Number of Volumes:				
College 5,000 to 50,000 University				
Current Periodicals:				
College 20 to 100				
University 500 to 2,000				
(Recommended by Goel. For a college lib	orary, at			
least a dozen periodicals for each of the subjects				
taught. Provision of textbooks for each pape	r is 10:1			
(1 copy of textbook for every 10 students).				
2 <u>Technical Processing</u> (Recommended by	Deshpande)			
Number of book recommendation slips				
per day	85-100			
Number of book recommendation slips that can be checked	75			
Number of books that can be collated per day	80			
Number of books that can be accessioned per day	00			
Number of books chat can be fully catalogued	25			
Number of books that can be classified	25			
Number of curds that can be filed:				
1 Author cards	250			
2 Classified	300			
300 books can be call numbered on the spine per day				
250-300 book cards can be prepared per day.				
One can check 25 books with orders placed and them.	accession			
Number of books that can be shelved in a day:	300			
Number of books that can be received in a day	250			
Number of books that can be issued in a day.	300			
Number of reminders that can be issued				
in a day	150			

3 Finance.- Radhakriehnan Commission (1S48)

Optimum: 6 or te 40 for a student

Rangsnathan Committee (UGC)(1957) t

Rs 15 per student, Rs 200 per teacher and research fellow.

Kothari Commission (1966)

6.5% or Rs 25-per registered student and Rs 300 per teacher Expenditure on Reading Materials,

Staff and other items ... 4:5:1
Staffi Books ... 40:60 (It should be revised at a later stage)

Provision equal to 10% on Furniture and equipment; 5% of the bock budget for binding and 8% for miscellaneous items.

(Remocrnaided by Deshpande)

10% of the total budget of a University or College 10% of the book budget for furniture and equipment 5% of the book budget for binding 8% of the book budget for miscellaneous expenses.

72 United Kingdom

721 <u>Specialist Libraries</u>

In the United Kingdom, ASLIB has taken the initiative in developing manpower standard. In 1958-1959, D J Campbell (3) conducted a survey of fifty-two industrial libraries. This indicated an average ratio of one documentalist to fifty four persons who actually used the service, with a range below twenty to about two hundred persons. In 1961, Ashworth (1)

recommended the following staff standards for an industrial library. This standard is based on the number of users of services.

Number of gra- duate technical staff served	Suggested information and library staff
1-5	In all fields of interest one of the technical staff will need to spend from one tenth rising to one quarter at the upper limit of the range, of his time in liaison with research associations, and other outside sources of information.
5-10	A small library will be kent and cared for by part of the time {up to one half) of a clerical assistant but one member of the technical staff will, still perform liaisen duties.
10-20	One librarian most probably a woman, who will carry out her own clerical duties {except correspondence}. Little information service can be offered.
20-30	General engineering, chemical technology, basically repetition processes. Two. Aeronautics, instrumentation, organic chemistry, plastics. Three persons.
30-50	Three persons
50-100	Pour persons generally, but five in high scientific-content industries.
100-150	Pive persons generally, but six in high scientific content industries.
200-300	At the rate of one in thirty persons generally, but one in twenty-five for high scientific content industries.
300-500	At the rate of one in forty persons generally, but one in thirty-five for high scientific content industries.

722 University Libraries

In respect of university libraries, the recommendations of Parry Committee report (38), for a model university expenditure for a Library are 500,000 vol in a university, 3»000 undergraduates, 1,000research students, and 500 teaching staff. In this model, it was assumed that 25 percent of the sum spent on book and periodicals would be spent on binding and 10 percent on "sundries". It. was recommended that 50J50 is the reasonable division between book funds and staff salary. This amounts to nearly 6% of the total university expenditure.

723 College Libraries

In respect of college Libraries, the following three different standards have been proposed.

7231 Polytechnic

The Library Association's standards are as follows (1968):

- 1 Document stock 150,000 volumes 3,000 periodical publication
- 2 Users 2,000 undergraduates
- 3 Budget per annum

 Books end periodicals f 60,000
 Other library materiels £ 10,000
- 4 Staffing requirements are given in proportion to the size of the stock.

7232 Colleges of Technology

In 1971, Library Association stipulated the following standards:

Document stock:

College without Degree: minimum 10,000 books College with Degree: minimum 25,000 books

7233 College of Education

library Association's recommended standards are as iollowsi

Document stock

Effective stock in the Main Library 20,000 volumes School service section 7,500 volumes

Acquisition rate

60 books per student in a college of 500 students

75 books per student in a college of less than 500 students

Budget

Minimum expenditure upto first 500 students

Per student £ 6

Per Teacher £.15

for more than 500 students

Per Student £ 3.12

Per Teacher / 9

For binding 10%; for other expenditure 5% of the budget.

73 United States of America

This Standard for Special Libraries (33) fovulated by the Special Libraries Association concerns objectives and functions of specialist libraries. Specific standards for staff size is rarely given. For example, Pauline Lybeck (24) suggested minimum standards for

library staff requirements by size of agency billings for an advertising agency in USA. This standard is as follows*

Agency Size in billings	Staff Size
S 5 to \$ 10 Billion	2
\$ 10 to \$ 25 million	4
\$ 25 to \$ 50 million	5
\$ 50 to \$ 100 million	6
\$ 100 to \$ 200 million	8
\$ over 200 million	10 +

These are given as broad fuidelines. Similar standards for staff size will have to be developed for different types of specialist libraries.

For a university, the Association of Research Libraries and the Association of College and Research libraries appointed a joint committee in 1968 with Robert B Downs as Chainaan. This committee surveyed fifty leading university libraries, and drafted a set of norms in respect of financial support, resources of various types, personnel, etc. The standards are as follows J

Finances %

Total library budget — \$ 3,000,000

Library's percentage of university expenditure 5

Percentage of library expenditures for salaries 60

Percentage of library books 34

Percentage of library expenditures for general expenses 6

Student per capita expenditures - total -S 150

Student per capita expenditure -books - S 50

13,000 students : 7,250 titles

Upto 600 students: 50,000 volumes

For each additional 200 students: 10,000 volumes.

2 Technical Processing

Cataloguing (including Classification)

250 titles/month/professional

Typing of added entries, stamping, etc: 100 cards per hour

Typing revised at 180 cards per hour and 25 caster cards per hour

Overall work: One volume per hour per member of staff, including professional and non-professional.

3 Staff

Ono professional to 300 students. Professionals ere to be at least 31% of the whole staff.

Public services: 1 for 200 users

Book Ordering: 2,500 titles per staff member

One Librarian: 10,000 titles ordered

Ratio of clerical to professional staff: 3:1

Cataloguing: Annual output per cataloguer: 3,00 titles. Ratio of clerical to professional staff: 2:1

4 Finance

6% of the total budget.

Staff: 56% Books and periodicals: 34%

Binding: 3%. Others: 7%

Per-capita student expenditure: \$154 or an approximately, \$ 50 for books and periodicals.

3 CONCLUSION

Development of library standards all over the world

is still in the stage of infancy. This is largely due to research in the work study, time study, and costanalysis of library operations and services having not been promoted consciously. Barring some pioneering efforts, little enthusiasm has been shown towards such studies in many library end documentation centres. However, in recent years these studies are picking up momentum. This is largely due to the need for developing national, regional, and local plans for library and documentation systems. This, in turn, has been promoted due to the conscious recognition of the role of library end documentation systems in overall socio-economic development of nation; However, if library planning has to be effective and realistic it is essential that reliable performance standards are established. Such standards cannot come into existence They have to be consciously nurtured and overnight. developed through co-ordinated efforts of several specialists — such as librarians, work study specialists, ergonomists, statisticians, standards engineers and library planners. The library associations in different countries have taken significant initiative in formulating some basic standards. However, the implementation of these standards has to be promoted with greater zest. It is en important principle in standrrdisr.tion that the standards will grow only in the hands of its Therefore, it is only through the implementation of these standards at all levele, the library standards can be realistically modified, developed, and rationalised. The training courses for librarians at various levels should not only make the trainees aware of these standards, but also train them in

using the standards in actual practice. They must also be made familiar with the various factors that are taken into account while formulating the standards. This will not only give scope for improving the existing library standards, but also enable one to identify the areas for never library standards. This in turn will help drafting plans for library and documentation systems with greater assurance and realism.

91 BIBLIOGRAPHICAL REFERENCES

- 1 ASHWORTH (Wilfred). Staffing the library. (British Institute of Management Conference on "New Industrial Libraries". 1961. Working paper). (Librarian and bock-world. 49,9; 1960; P 175-8, 130-1).
- 2 ASSOCIATION OF RESEARCH LIBRARIES and the ASSOCIATION OF COLLEGE AND RESEARCH LIBRARIES (USA), DIVERSITY LIBRARY STANDARDS (Joint Committee on -): Report of the ARL-ACRL joint committee on university library standards. 1969. P 8.
- 3 ASSOCIATION OF SPECIAL LIBRARIES AND INFORMATION BUREAU (United Kingdom). Survey of information library units in industrial and commercial organisations. 1960. London. Aslib. 43 P.
- 4 BAKEWELL (KGB). Standardisation in the organization of library material. (In Houghton (3), Ed. Standardisation for documentation. 1969. P63-73).
- 5 CAMPBELL (D J). Small technical libraries. Part 1: A guide for librarians without technological training. (Unesco-bull lib. 26; 1972; 264-69).
- 6 CLAP? (C B). Critique and design on the cost of cataloguing. (Collece and research libraries. 3; 1942; 163-9).
- 7 DEFNADAYALU (C). Standardised library practices and job classification. (IASLIC Conference (S) (1969) (Bombay). Working papers. 1969. P 161-70).
- 8 DESHPANDE (K S). Hundred and one eutrac. (Timeless fellowship. 3/4; 1966-7; 95-117).

- 9 —. Problems facing university libraries. (limeless fellowship. 3/4; 1066-7; 95-117).
- 10 DOUGHERTY (R M) and HEINRITZ (P J). Scientific management of library operations. 1966.
- 11 DUYVIS (Friz Donker). Standardisation as a tool for scientific management. (Lib trends. 2;1954; 410-27).
- 12 GOIL (N K). College libraries in India: Suggestions for management/administrative structure. (Lib herald. 10;1968; 199-210).
- 13 College libraries in India. Needed a policy for development. (Lib herald. 9;1966; 198-237).
- 14 —. College library. (Lib herald. 5;1962; 6-12).
- 15 HUMPHREYS (K W). Standards for libraries in Great Britain. (Lib trends. 21;1972; 312-29).
- 16 —. Standards in university libreries. (Libri. 20;1970; 144-55).
- 17 KEMPER (Robert Z). Library planning: The challenge of change. (Voigt (Melvin J), Ed. Advances in librarianship. VI. 1970. P 207-39)
- 18 KRISHNA MURTI (C S). Role of library associations in standardizing the library profession. (Lib herald. 11;1970;251-60).
- 19 LIBRARY ASSOCIATION (United Kingdom). Libraries in the new oolytechniques. (Library Association Record. 70:1968;240-3).
- 20 —, COLLEGES AND FURTHER EDUCATION SECTION. College libraries: Recommended standards of library provision in colleges of technology and other establishments of further education. Ed 2. 1971. London, Library Association.
- 21 —, Colleges of education libraries. Recommended standards for their development. 1972. London, Library Association.
- 22 —, University and Research bectior.. College libraries: Recommended standards of library provision in colleges of technology and other establishments of further education. 1971. Louden; Library Association.

Gopinath

- ICHMAN (Otto). Efforts for international standardization in libraries, (Lib trends. 21; 1972, 330-53).
- LYBECK (Pauline). Guidelines for standards for advertising agency libraries. (Special libraries. 55-1964; 277-30).
- MANGIA (P B) and SARDANA (J L). Development of university and college libraries in India during the fourth five-year plans Sucpestions. (Indian Lib Asoon Bulletin. 6;1970; 109-34).
- MITRA (D P) and MISHRA (V N). Soue prerequisites for establishing work standards for library jobs. (IASLIO Conference (8)(1969) (Bombay), Working papers. 1969. 171-3).
- HURRAY (F B). Canadian library standards. (Lib trends. 21;1972; 298-311).
- NEH AMECHAN (A). University library resources: Some observations. (Lib herald. 6,1963;87-95).
- —. SEETHARAKA (S) and GOPINATH (M A). Planning of a library and documentation systems A model. (Annual Seminar, (DRTC). 11; 1974; Paper G).
- PENNA (0 V). Planning of library and documentation services. Ed 2. Revised and enlarged by P K Sewell and Herman, Liebaers. 1971.
- RANGANATHAN (S R) document, documentation and standardization. (lib herald. 6; 1958; 1-15).
- —. Librery administration, Ed 2. 15:9. P 27-31.
- SPECIAL LIBRARIES ASSOCIATION (USA). Objectives and standards for special libraries. (Special libraries. 55; 1964;67.1-80).
- STANDARDS FOR college libraries. (Coll Pes Lib. 20;1959; 274-80).
- STANDARDS FOR South African public libraries. Ed 2. 1965.
- TUTILE (Helen Welch). Standards for technical services. Cost studies. (Voigt (Kelvin J), Ed. Advances in librarianship. V 1. 1970. P 95-11).

- 37 UNIVERSITY GRANIS COMMISSION (India), LIBRARY (—Committee). (1951). (Chairman S R Ranganathan). University and college libraries. Report. 1965•
- 33 UNIVERSITY GRANIS COMMITTEE (Great Britain), Libraries (Committee on --) (1963). (Chairman: Thomas Parry). Report. 1967.
- 39 WTATKINS (David R). Standards for university libraries. (Lib trends. 21;1972; 190-203/.