

COLLECTION DEVELOPMENT IN DEFENCE SCIENCE LIBRARY

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ABSTRACT

Basic elements of collection development process are presented in this paper. Collection development of Defence Science Library is discussed in detail. Data presented in the paper reflects that there is a steep fall in the number of titles subscribed during last six years. On the other hand reference collection of library has become richer during past few years. Resource sharing is discussed as a solution to overcome the problem of increased cost of publications and present financial crunch.

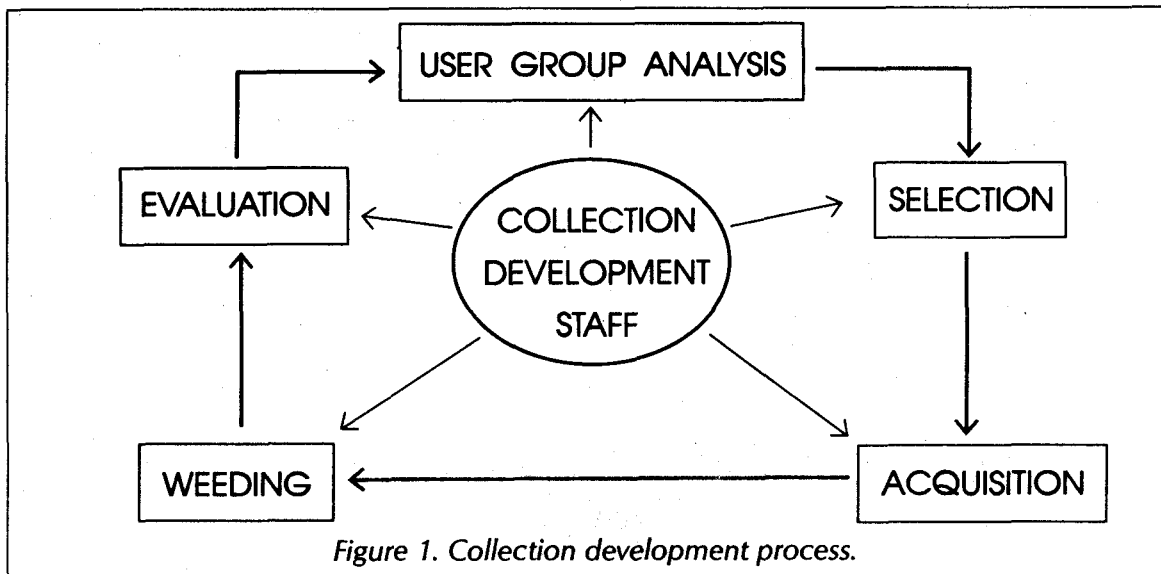
1. INTRODUCTION

A library collection is the sum total of library materials – books, manuscripts, serials, government publications, pamphlets, catalogues, reports, recordings, microfilm reels, microcards, microfiche, punched cards, computer tapes, etc. Collection development is a challenging activity which refers to the systematic building up of a library collection by way of periodic evaluation of the collection, selective acquisition and weeding.

2. ELEMENTS OF COLLECTION DEVELOPMENT

The basic elements of the collection development process are:

- determining what information resources are needed (community analysis)
- policies
- identifying or selecting the appropriate items,
- acquiring, and



- evaluating the collection and weeding out items not required.

Collection development is a common activity in most libraries and information centers. Figure 1 illustrates six major components of the process of collection development as a continuous cycle in the life of a library or information centre.

2.1 User Group Analysis

Collection development is a dynamic process that should involve both the information professional and the user community. Knowledge of the user community is the keystone to effective development. The more the collection development staff knows about the work roles, general interests, education, information/communication, behaviour, values, and related characteristics of potential users, the more likely the collection will be able to provide the desired information at the required time. No collection can completely meet the information needs of an individual user or a class of users. With limited resources to serve a wide range of interests, there must be proper analysis of the information needs

of users for developing an effective collection.

Defence Science Library (DSL), apart from the usual methods of need assessment; periodically organises meetings of the user groups/project heads and collection development staff to know about their future research activities, present project assignments and on that basis determines to enrich the collection in the required subject fields.

2.2 Policy

No library can be effective without a policy which sets out aims and objectives, identifies user groups and services, and indicates priorities amongst them. Since libraries are usually short of resources, prioritising is an essential part of the process and use of library budget is a key instrument for prioritising services.

Effective collection development requires creating a policy to correct weaknesses and to strengthen a collection. Collection development policy is a written statement, providing details for the guidance of the library staff. The Defence

Science Library also has a collection development policy which leads to the following:

- Informs the readers about the nature and scope of the collection
- Informs about assigning priorities
- Forces thinking about organisational goals to be met by the collection
- Establishes some degree of commitment to meeting organisational goals
- Sets norms for inclusion and exclusion
- Reduces the influence of a single selector and personal bias
- Provides a training/orientation tool for new staff
- Guides the staff in handling problems
- Aids in weeding and evaluating the collection
- Helps in rationalising budget allocations
- Provides a public relations document
- Provides means of assessing overall performance of the collection development program
- Provides outsiders with information about the purpose of collection

2.3 Selection

The selection of library materials is a highly time consuming, intellectual, and continuous process. Selection is the process of deciding which materials to acquire for a library collection. In essence, it is a matter of systematically determining quality and value. But, there is not enough money available to buy everything that might be of value to the user community. This necessitates that one or more professional staff members in the form of a selection committee, must decide which item should or should not be purchased.

The sources for book selection may consist of:

- Readers' suggestions
- Book reviews in periodicals
- Subject bibliographies
- National bibliographies
- Trade catalogues
- Bibliographies of reference works
- Bibliographies of periodical publications
- Bibliographies of abstracting periodicals
- Bibliographies of translations
- Books in Print and Book Banks in CD-ROM form
- Book fairs

2.3.1 Books

In book selection, each book has to be evaluated individually against a background of other factors – library policy, user demand, budget allocation, etc – before a selection decision can be made.

Often, only a single aspect of a book may ensure its selection, e.g. the reputation of the author, or the appearance of a new work by a famous novelist or an authority on a subject. Similarly, another feature may rule out a publication – for instance, wrong level of content, an unusual format, or a very high price. Some key characteristics of books are listed here which help in the selection decision:

- Price
- Date of publication
- Author
- Publisher
- Level of readership
- Topic and contents
- Readability

- Language
- Index, bibliography
- Physical features of book e.g. format, binding, illustrations, typography
- Publisher's information
- Reviews – reviews in the popular press, specialist journals and general reviewing journals.

2.3.2 Periodicals

Periodicals are often the first printed sources of information about a new subject or development, and generally contain the most current information about a topic. Selection of periodicals for a special library requires a study of subjects covered by the library. Directories of periodicals, general guides to serial publications, and similar compilations that list titles of periodicals covering different subjects should be referred for selecting periodicals. The complete list of periodicals on subscription should be reviewed annually to enable new titles to be added and those of lesser value be considered for deletion. Important abstracting and indexing journals that cover the same subject areas should not be purchased. Suggestions from the users also form one of the basis for selecting periodicals.

2.3.3 Government Publications/ Reports

Government publications and reports are important part of a library's collection. They contain nascent microthought or policies of Government. Government documents can be identified by a number of labels such as government publication, official document, federal document, agency publication, legislative document, presidential document, etc.

Defence Science Library maintains a unique collection of reports literature.

Various reports which are coming to DSL are as follows:

Reports –

National Technical Information Services (NTIS), Research and Development (RAND) and National Aeronautical Space Administration (NASA) reports; Second World War, and British Intelligence Observations (BIOS) reports

Patents –

American (US), British, German, French, and Japanese patents.

Specifications –

US Mil specifications & standards, American Society of Testing Materials (ASTM), American National Standards Institute (ANSI), and Joint Services Specifications (JSS, India)

Standards –

American Society of American Engineers (ASME), BSI (British standards), BIS (Indian standards), and UK Defence standards.

Annual Reports –

DRDO, CSIR, and Public Sector Undertaking annual reports.

Miscellaneous –

General Accounting Office (GAO) reports, US Govt. Printing office (USGPO) reports, Organisation for Economic Co-operation and Development (OECD) reports, UMI dissertations; Canadian and Japanese reprints..

2.3.4 Audio-visual Materials

Knowledge is no more confined to the usual book form but is now-a-days also coming in various audio-visual forms. These audio-visual forms are more convenient to

users for assimilation and quick understanding.

The physical audio-visual forms in which literature is coming in DSL are audio-cassettes, video cassettes, microfilm and microfiche. Facilities and equipment required for using them is provided by DSL. The commonly used equipment required for using the aforesaid audio-visual materials are:

- Tape recorders
- Colour TV sets
- Video cassette players
- Head phones
- Microfilm and microfiche readers
- Microfilm/microfiche reader-cum-printers

Defence Science Library has acquired 360 video cassettes in the field of military science, computers, management, environment, optics, communications, etc. About 125 audio cassettes are available in DSL mainly covering the area of linguistics and management.

A lot of literature in microfiche form has also been acquired. There are about twenty nine thousand microfiche in DSL which covers the area of lasers, military science, combustion, material science, environment, etc.

2.3.5 CD-ROMs and Databases

Use of data processing techniques for processing, organising and disseminating information in libraries has led to the emergence of various bibliographic databases. These databases may be local, national or international in scope. The use of databases accessed through telecommunication links and searched online, has become familiar to most librarians over the past decade. A more

recent information storage medium are the invaluable CD-ROM databases. Evaluation of the databases themselves can be a complex process. The databases must not only be compared against others in the same subject area, but where they exist in both online and CD-ROM form, the two formats must be compared for effectiveness.

The following are some of the important criteria for evaluation of databases:

- (i) Subject coverage of one database in relation to other.
- (ii) Sources covered and type of literature included such as books, journals, reports, etc. Retrospective coverage may differ between online and CD-ROM services.
- (iii) Average delay between publication of the documents and their addition to the database.
- (iv) Effectiveness of the indexing and retrieval system used.
- (v) Software system, including documentation and the existence of a help desk.
- (vi) Costs – Online searches add a considerable and frequently recurring expenditure to a library's budget whereas CD-ROM involves cost the original purchase and its cost effectiveness increases with increasing use.

Defence Science Library has added many CD-ROM databases to its collection in order to facilitate information retrieval services and to provide its users with more precise and accurate information in minimum time. The following CD-ROM databases have been acquired recently:

- INSPEC Ondisc (UMI, USA)

- NTIS Database (Silver Platter, USA)
- LISA – Library and Information Abstracts (Silver Platter, USA)
- ISA – Information Science Abstracts (Silver Platter, USA)
- Applied Science & Technology Index (HW Wilson, USA)
- Wilson Business Abstracts (HW Wilson, USA)
- Whitaker's Book Bank (Whitaker's, UK)
- Ulrich's Plus (RR Bowker, USA)
- Books in Print Plus with Book Review Plus (RR Bowker, USA)
- Aldrich Chem Data Search (Aldrich Chem Co. USA)
- McGraw-Hill S&T Reference Set (McGraw-Hill, USA)
- Current Technology Index (Bowker-Saur, USA)
- GDI – Global Defence Information (Tel-dan, Israel)

All the above mentioned CD-ROM databases are important abstracting and indexing services and include journal articles, conference proceedings, books, reports, etc.

2.3.5.1 Online databases : Defence Science Library is also conducting searches on foreign databases through DIALOG for retrospective coverage.

Defence Science Library has also developed inhouse database for online catalog which at present has around 63,000 records (including books and reports) to give easy access to its users to know about the holdings of the library.

2.3.6 Gifts and Exchange

Library often acquires some documents as gifts. These gift items are handled by the acquisition department of the library and

the ultimate selection and evaluation of gift is the responsibility of librarian.

Library also acquires some items through exchange between libraries. This method is often used to acquire documents from countries whose commercial trade operations are limited. Such exchanges are established through formal agreements between the co-operating organisations.

Thus, gifts and exchanges can play an important role in developing a comprehensive subject collection. DSL received about 300 publications through gifts during the period September 1986 to December 1993 and is currently receiving 40 journals through exchange.

2.4 Acquisition

Acquisition is the process for obtaining materials, after the selection. Acquisition involves selecting vendors, placing orders, sending reminders to vendors and finally processing the materials and bills when received. In DSL, acquisition activity is divided in three categories:

2.4.1 Books

After approval of the Book Selection Committee, order for each title is placed with appropriate vendor. As soon as a book is received it is processed for acquisition, classification, cataloguing and put on display. Reminders are generated for non-receipt of publications. Bills for the acquired books are processed for payment.

Defence Science Library at present has a total collection of about 55,000 books which include handbooks, series publications, advances in various subject areas, conference proceedings, etc. Some statistical data about acquisition of books in DSL is given in Table 1.

Table 1

Year	No. of books acquired
1985-86	646
1986-87	827
1987-88	744
1988-89	876
1989-90	2,197
1990-91	1,866
1991-92	2,967
1992-93	1,704

2.4.2 Periodicals & CD-ROMs

Periodicals and CD-ROMs are acquired on subscription basis by placing orders with various publishers through agent(s). The agent takes the responsibility for proper addressing of the periodicals and CD-ROMs, claiming missing issues in the case of periodicals, and notifying the library when subscriptions fall due or when there are changes in the subscription rates. Foreign publications are also obtained in the same manner. There are a few periodicals which cannot be handled through dealers, and require membership with an association. Such titles are subscribed directly by the library. Orders for periodicals are placed annually. The title list is decided well in advance latest by August every year.

Defence Science Library currently has around 32,000 bounded periodicals and subscribes to 480 journals, in the field of military science, computer science, library science, materials science, physics, chemistry, electronics, environment and general sciences, out of which 50 are Indian

journals. Ten Society publications are received through membership. DSL also subscribes to newspapers and magazines for general reading. The statistical data for the subscription of journals in DSL during the last few years is given in Table 2.

Table 2

Year	No. of journals subscribed
1988	724
1989	780
1990	596
1991	567
1992	396
1993	477

Due to the financial crisis, subscription of journals has decreased from the year 1990 onwards, but needs of the user community of DSL is met by resource sharing with various libraries.

2.4.3 Reports

Libraries acquire government documents in a variety of ways. Some libraries have standing orders through official or commercial vendors, while others purchase documents individually or acquire most of their documents free of charge. Some libraries have depository collections with international agencies. Depository collection is an agreement between the library and the government publishing body, which provides publications free of charge.

Defence Science Library is acquiring reports mainly on subscription basis from NASA, RAND, IHS for US military

specifications, and deposit/advance remittance through USGPO, US Patent and trademark office.

Defence Science Library has more than 83,000 technical reports, 18,000 standards/specifications, 8,000 patents, 12,000 reprints and 29,000 reports in microfiche (SRIM) form.

2.5 Weeding

Weeding has been defined as 'the practice of discarding or transferring to storage excess copies, rarely used books and materials no longer of use'. Before a weeding program is implemented, an evaluation of library policies and goals must take place. This evaluation should also include analysis of the present situation, consideration of possible alternatives, feasibility of a weeding program in terms of library operations, faculty co-operation, type of library involved, types of materials collected, and cost. Some of the data for the weeding program should come from the collection evaluation activities that the selection officers and others have undertaken on a regular basis. An active weeding policy should be a part of the library's collection development policy. Selection and weeding are similar activities as both are necessary in effective collection development program and require the same type of decision-making rules. The same factors that lead to the decision to add an item can also lead to decision to remove the item sometime later. So book selection policy will also determine weeding policy.

Weeding out in DSL is carried out annually, in which a team of experts under guidance of the selection officer, prepare a list for books which are old and not relevant to the subject area covered by DSL, whose new editions have been acquired and those which are rarely used. Another list is

prepared for the books which are physically damaged and can not be read. The first list is sent to all the laboratories/establishments of DRDO to know if any book or material from the list is required by them for their projects. The books which are demanded by any laboratory are permanently transferred to them. For the rest of the books which are not demanded by any other lab and those physically damaged, a meeting of weeding out board is called and approval is taken from all the committee members to weed them out from the library.

2.6 Evaluation

Evaluation of the collection completes collection development cycle. Since it is closely tied to the need assessment activities it forms the basis for the next cycle.

Collection evaluation involves both objects and activities as well as quantitative and qualitative values. As there are so many subjective and quantitative elements in collection development, the person for collection development should be an intelligent, experienced and cultured selection officer with diplomatic abilities. DSL also has a selection officer with a team of experts to evaluate, from time to time, the usefulness, strengths and weaknesses of the collection, and finally how effectively the collection development has been achieved.

Defence Science Library has a rich collection of books and reports as well as non-book material in the area of military science and technology, lasers, computer science, radar technology, optics, library science and management. A good number of reference sources covering almost all the science subjects apart from military science and library science are added to the collection. These reference sources include encyclopaedias, handbooks, directories,

year-books, manuals and guides. All the titles of Jane's publications and SIPRI publications are procured every year to enrich the military science collection of the library.

Another remarkable feature of DSL is that it has a good number of important society publications such as SPIE (Society for Photo-optical Instrumentation Engineers) covering areas of optics, optoelectronics, lasers, communication, electronics; IEEE titles in video cassettes, etc.

3. RESOURCE SHARING

Now-a-days cooperation and resource sharing through interlibrary loan have become essential part of collection development policies and procedures. Rise in the total number of items published each year in all fields of knowledge and rapidly inflating prices of both books and non-book materials cause intolerable pressure on the budgets of all libraries. DSL is also influenced by such factors and efforts have been made to fulfil the requirement of the users by utilising the resources of important Delhi based libraries viz. INSDOC, IIT, Delhi University Library, IDSA, NPL, American Centre Library, British Library, etc. DSL also shares the resources of some very important libraries located outside Delhi viz. National Aeronautical Laboratory (Bangalore), Bhabha Atomic Research Centre (Trombay), Instruments Research and Development Establishment (Dehradun) to meet the requirements of the DRDO scientists.

4. CONCLUSION

Selection and collection development are arts, not sciences; and as with any artistic endeavour, a person wishing to practice art, must devote years to develop

the necessary skills. In spite of all the problems like paucity of funds, price hike, limited resources, a person becomes proficient in the process of developing a balanced collection through professional skills and practice only.

5. FURTHER READING

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