TRAINING FOR COMPUTERISATION OF LIBRARY AND INFORMATION SERVICES

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1. TRAINING, EDUCATION AND DEVELOPMENT

The dictionary meaning of training is to bring a person to desired state or standard of efficiency by instructions and practice[1]. The main aim of training is to impart a specific skill which the recipient is expected to practice. Education, on the other hand, seeks to bring out and develop the innate qualities of a person or to enhance his general reasoning power. Whereas training focuses attention to meet the present job requirements of the individual, education prepares him for a future but not for a defined job. Training cannot be taken as an isolated activity but is considered as a development process by which a person applies his training skills for improving his job performance and increasing organisational effectiveness[2].

2. REQUIREMENT OF NEW SKILL

The debate on whether to use computer for library and information system is already over. The question now is when and how to start. The computer, because of its characteristics of speed, accuracy, storage, versatility and other advantages is ideally suited for information processing and to meet the challenge posed by information explosion.

With the increasing use of sophisticated technology (to be precise, information technology) in the library and information system, it is essential that the staff with necessary skill and proficiency is available to perform the jobs. For this purpose, the options are : either to recruit the new staff and declare some of the present staff as surplus or to train the present staff for the new jobs. Although a judicious mix of the two alternatives may appear to be more reasonable, the importance of the second alternative, i.e., training of the present staff is not minimized. Dowlin feels that the librarians functioning in an electronic age need three kinds of preparation[3].

(i) Technical knowledge related to computers and communications devices,

(ii) Readiness to introduce organisational changes necessitated by technological innovation. They should be able to

plan, develop and implement new systems and procedures and train staff in their use, and

(iii) Ability to deal with a wide range of people outside the library : people who supply hardware and those who supply software and with organisations that supply services either commercially or share the library resources.

3. COVERAGE OF COMPUTERISATION IN LIS COURSES IN INDIA

Although much care has been taken to include the above aspects in the library and information science curriculum of the academic institutions in developed countries, the progress has been rather slow in the developing countries. In India, almost all the 38 universities which are conducting the Master of Library & Information Science Course[4] have included computerisation in their syllabi but hardly any of these does justice to it due to lack of qualified faculty for teaching the subject and computer facilities for hands-on experience. However, exceptions to this are the training programmes of INSDOC and DRTC, where more coverage and emphasis is given to information technology and related aspects.

4. TRAINING PROGRAMME IN COMPUTERISATION

The training programme proposed in this paper is a short-term one. It is desirable to arrange it in-house by inviting suitable faculty required to impart training. For the purpose of designing and organising a suitable in-house training programme for computerisation, various functions in the libraries and information services can be grouped as under :

(i) Library Operations—ordering, cataloguing, serials control, budget control, and

(ii) Information Services—query search, SDI, online search of external databases, and information transmission through telecommunication networks.

4.1 Thrust Areas for Training

The thrust areas required to be covered for training in computerisation are : data input preparation, basics of hardware, use of software, knowledge of communication technology for information transmission, utilization of online databases available, etc.

4.1.1 Input Preparation

This comprises content analysis of document, identification of the bibliographic elements, preparation of the abstracts, assignments of the descriptors for subjects presentation and their validation with a thesaurus. All this information is to be recorded in the input sheet as per prescribed instructions.

4.1.2 Use of Hardware

This requires knowledge of the computer system in general. The microprocessor-based systems like personal computers (PCs) which are available at within-the-reach cost, are in use for library and information work as dedicated systems. Hands-on experience about their operation, particularly of data entry and retrieval, is necessary.

4.1.3 Use of Software

Software is an important element in computerisation. It may be developed in-house or may be acquired as packages from commercial and professional institutions. In-house developed software has advantage over the commercially available packages but the former is more time consuming and costly. Parthasarathy in his paper gives the essential features, steps for evaluation and sources of software packages[5]. Ted in her book gives details of a number of well known software packages for various library and information applications[6].

A new package called Mini Micro CDS/ISIS copyrighted by the UNESCO Library, Archives & Documentation Services is considered useful for library & information work. It can function on any IBM compatible personal computer and is available in India through NISSAT.

Some software packages which are very popular are available alongwith the personal computers. The software dBase III is a database management system for microcomputers and LOTUS 1–2–3 provides wordprocessing, graphics and spreadsheet functions. These software functions are also necessary to be learnt. A package called WORDSTAR for word processing functions is very useful for preparation of textual matter, often required for current awareness services and office work.

4.1.4 Information Transmission

This involves the study of the telecommunication systems such as multiplexing, optical fibre communication packet switched networks, cable TV and telecommunication services, such as videotex and teletex, electronic mail, electronic journal, facsimile.

4.1.5 Online Technology

Online access to international databases for bibliographical information is an important activity to provide comprehensive, exhaustive and up-to-date information. Knowledge about databases, commercial service agencies/vendors, search process is, therefore, essential. The training aspects have been discussed by this author in his paper 'Users' training for online bibliographic search system[7].

4.2 Inputs for the Training Programme

4.2.1 Faculty

The faculty should comprise library and information scientists with good knowledge and working experience in computerisation and computer specialists with sufficient exposure to library and information work. This calls for reorientation of library & information science teachers in computerisation activity. Besides subject expertise, the faculty members should have necessary teaching skill and aptitude.

4.2.2 Course Material

It should contain basic material on the subject, not necessarily written by the faculty members. The course material should cover all major topics and should serve as a reference source. The course material may be supplemented with the write-ups of the lectures or any other information material given by the faculty members.

4.2.3 Training Aids

In such a training programmes, apart from the conventional training aids including the blackboard, one can introduce a variety of other aids namely transparencies and slides for overhead projections, films, computer-aided instructions, etc. In this context instruction module like the computer-aided learning (CAL) designed by the College of Wales (UK) to study the DIALOG commands will be of great value[8]. The lectures sometimes are supplemented with case studies which can best be explained with the help of video films.

4.2.4 Computer Facility

Adequate computer facilities should be available to provide hands-on experience to each participant for about one hour a day.

4.3 Eligibility Criteria

Criteria for selection of suitable personnel from a library or a documentation centre for this type of training programme requires careful consideration. Watson[9] enumerates the following requirements and qualities which a trainee should possess. The trainees for such programmes should be selected from different levels in a library and documentation centre. They can be grouped into those at supervisory, operational and managerial level. Some of these may be :

i) Educational background,

ii) Level within the organisation,

iii) Work experience,

iv) Absorption ability,

v) Openness to new ideas, and

vi) Perceived need for self improvement.

Of these the first two categories are important.

4.4 Training Curriculum

It may include lectures, practicals in the form of as one word experience, group discussions, tutorials and visits to institutions where the computerisation is in operation. Al least one hour per day may be provided for hands-on experience on the computer system. The distribution of these components in the curriculum may be lectures (40%), practicals (40%), tutorials (10%) and visits (10%).

4.5 Duration and Capacity

Two-week programmes with a schedule of six hours a day will be necessary to provide an overall view and some practical experience on the subject. The number of trainees can be restricted to ten for providing individual attention to the participants and also for the computer facility for hand-on experience.

4.6 Evaluation

According to Watson the concept of evaluation seeks to answer essentially the following questions :

i) Did the training achieve what it was supposed to achieve?

ii) Could the training be done more effectively and efficiently, and

iii) What has been the overall significance and value of the training?

Feedback from the participants in the form of a questionnaire should be obtained and analysed. This will help in improving the future programmes and make them more effective. Follow-up studies should also be made to ascertain that the training imparted is being properly utilised.

5. TRAINING PROGRAMMES OF DESIDOC

DESIDOC has been conducting training programmes in information science & technology for the benefit of the personnel working in the libraries & technical information centres attached to the DRDO labs/estts. The training programmes conducted on this subject so far by DESIDOC are as under :

i) Use of microprocessors for information processing,

ii) Application of microcomputers to library & information services,

iii) Input preparation for computerised information system,

iv) Application of computer to library and information work, and

v) Use of mini micro CDS/ISIS software package.

One of the programmes (ii) was conducted by Prof FD Anderson of the RG Institute of Technology, Aberdeen (UK). The programme (iv) was conducted for Govt. of India Librarians Association. The programme (v) was organised in collaboration with NISSAT. One of the programmes (iii) on CCF (Common Communication Format) was held on 28–29 September 1987.

DESIDOC is planning a three-month programme on Information Technology in which a more comprehensive account of the computer application in library and information services is covered.

Acknowledgement

The author is grateful to Shri SS Murthy, Director, DESIDOC for his encouragement to write this paper.

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Learning is finding out what you already know.
Doing is demonstrating that you know it.
Teaching is reminding others – that they know just as well as you.
You are all learners doers and teachers.

Richard Bach