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CHAPTER E

## LAW 1: BOOKS ARE FOR USE: HOW TO SEE TO IT!

### 1 Improvising the Usability of Documents

During the 1960's in the United States, a great many developments have taken place in trying to improve the usability of documents (all printed forms of messages and data, that is, recorded knowledge). More often than not, the headlines are made when a bigger or better computing system is used, but we should not confuse ourselves: the improvements came because a competent staff investigated the problems presently faced by users trying to get documents to use, investigated the user himself, and his channels of communication, and the media he selects to find information. Only when they were sure that he values the use of documents above other media have they tried to improve his access by the use of computers or other mechanical devices. Many studies and efforts could be cited and their findings quoted, but let one study of physicists serve as an example.

### 2 Media for Information and Communication

Twelve different media were cited by the physi-

cists surveyed as best performing seven information functions:

*1 Articles in periodicals read in *own, or library copy*;

2 Reprints they collect;

*3 Manuscripts (including drafts) they receive from author;

4 Technical reports distributed within own institution;

5 Technical reports distributed by other than own institution;

6 Telephone conversation;

*7 Face-to-face discussions with persons working in their institution;

8 Face-to-face discussions with persons not currently working in their institution (e g, at scientific meeting, etc);

9 Oral presentations made at scientific meetings or conferences;

10 Copies of oral presentations (including lecture notes and conference proceedings);

11 Private correspondence; and

12 Other.

*Found to be most important.

### 3. Needs of Readers, or Information Dissemination Function

The following were considered to be the main objectives of use of the different media mentioned in Section 2.

1 General awareness of current state of physics;

2 Find out who is working in what area or on what problems;

3 Source of specific ideas for work *in progress;*

4 Source of specific ideas for *new* work;

5 Inform others of my research activities;

6 Getting up-to-date in a new area; and

7 Browsing stimulation.

The study showed the high value of articles in periodicals and manuscripts in respect of all the seven of the information functions. With this knowledge, the American Institute of Physics proceeded with their plans for a computer-based information system to publish and disseminate information in the field of Physics in printed form. Because face-to-face discussions with persons were the second most important media with respect to meeting the

information needs (3) and (4) above, the American Institute of Physics expanded its responsibility for organising meetings for the members of its member societies. They have sought new and better ways of performing these important information dissemination functions because they recognise that "books are for use."

## 4 CICIN Conference

### 41 Library Network

A recent conference in USA at Airlie, near Warrenton, Virginia, brought one hundred leaders in the American library and communications world together to discuss and make recommendations for national policy regarding library and information networks. Without the dedication that *books are for use,* it would have been difficult for some to agree to certain recommendations because they conflict with their institutional objectives. For the greater good, then, the group established certain goals for *library network services.* I cite them here to indicate how far Dr Ranganathan's first law can be pursued.

At the CICIN meeting sponsored by ALA, we agreed that *it is a legitimate need of every library or information centre to call upon information networks to identify, locate and make available all*

*forms of materials and services and to provide efficient and dependable information delivery services to the ultimate seeker of information.* This implies a freer interinstitutional communication structure.

42 MAKING READERS AWARE OF INFORMATION

We agreed at the Airlie Conference that the major goal in the provision of information services through a library network should be to facilitate *learning* in its broadest sense. Libraries and other information centres at the present time are able to provide the storage, retrieval, and display systems for information that can be utilised by a *limited* number of patrons with a fairly well defined need and clearly articulated demand for services. Use of these services is conditioned by the perceived expectation of satisfaction on the part of the user. Success reinforces usage and disappointment leads the patron to seek elsewhere or to let his needs go unfulfilled. To have continued use of our libraries and information centres, initiative must be taken by the service agency to make their services known to potential users. They must develop the means and take a more active role in identifying and defining a patron's need for information. Let us call these *awareness* services — one of our first tasks.

43 BIBLIOGRAPHICAL SERVICE: MEDIATION

To use information for learning, the perceived

need for information must be translated into the provision of information to meet that need. This *mediation function* depends on the interpretation of the need, and on the availability and use of *directory systems* and *consulting services* that lead to the eventual delivery of the information and information services needed. Thus, the second function to be performed by a service network of libraries and information centres is the provision of information *about* information and information systems. We call this *bibliographic* or *intellectual* access.

### 44 Physical Access to Documents

In addition to this intellectual access, provision for physical access by *delivery* systems will make information available in the place, time, and form that is best suited to the user. It is recognised that the problems of resource management and control in a network will be exceedingly complex, but that these problems must be solved with a primary view towards the more expeditious delivery of informational media to meet service demands.

### 45 Evaluation of Service

Even with a network with objectives to provide awareness, mediatory access, and delivery service,

we still agreed at the CICIN Conference that the network must provide an *evaluation* service both to aid the user in guiding his behaviour, and sensing his opinion. We need the necessary feedback mechanisms at all levels which will make such a network adaptive to changing patterns of need and use. In this sense, the network is itself a learning mechanism which is aware of both its parts and the environment in which it operates and is able to modify its behaviour accordingly.

**5 Change of Pattern of Service**

These five services — awareness, mediation, access, delivery, and evaluation — describe the user-system interface in terms of the benefits to be provided by an information network. This delineation of services at Airlie seems to be a natural extension of the First Law if we put it into a larger context of library and information networks. There should be no mistake that, what is being contemplated under the term library and information, something quite new and different from conventional library systems is envisioned. It is a new medium for the dissemination of knowledge. Are we librarians prepared for such a change in our professional lives?

Such developments as information networks, and system evaluation studies in the U S have brought

about a general awareness that either books are for use or libraries should not be supported and stay in business. Many people have strongly criticised "traditional library service" in the United States and have questioned whether the established methods are the ones to perpetuate.

**6 Impact on Library Education**

Such reports as *Libraries at Large, Library Response to Social Change*, and the new A L A Policy on Education and Manpower force us in library education in the United States to engage in some self-evaluation and reassessment of our curriculum. We have to ask ourselves: how do we teach the new version of the First Law of Library Science? I am not sure library education in India is undergoing such upheaval, but reflections on developments in one country may quite possibly have some relevance for our colleagues elsewhere. The following remarks are offered in that spirit.

Students in American library schools are asking for a new curriculum and for class activities which are relevant to today's and tomorrow's libraries. Should we admit that library education goals need to be revamped? Can we stem the tide of increasing irrelevancy of many of our libraries today? One possibility I suggested in a talk I delivered in Texas in the Spring of 1970 was to "put knowledge to

work" in today's library schools. Knowledge about librarianship, I contended, exists in the form of library research and development efforts which are available but not always integrated quickly into a library school curriculum. D W MacKinnon (8). said this about the word *knowledge*:

"Knowledge is the result of playing with what we know, that is, with our facts. *Ledge,* the second element in the word *knowledge,* means apart. A knowledgeable person in science is not, as we are often wont to think, merely one who has an accumulation of facts, but rather one who has the capacity to have sport with what he knows, giving creative rein to his fancy in changing his world of phenomenal appearances into a world of scientific constructs."

A knowledgeable person in librarianship, then, would be someone who has the facts as well as the experience of using these facts, taking them apart as a young boy might examine a clock. If the object of library science education would be to develop creative and knowledgeable librarians, then the stage must be set for this. Passive learners do not make creative librarians. Passing an examination or series of examinations is not the best criterion for judging professional promise, or certifying that someone is a knowledgeable person.

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Instead of the usual array of admission tests, lectures, class work, term papers, reading lists, and oral reports, I ask you to imagine a library school which would operate as follows.

### 61 Admission to Library Course

The object of the *admission procedure* would be to determine if the student has the potential to develop in professional competence and take his full responsibility as a librarian. To ascertain this potential, he would be interviewed by "library school representatives" (professional librarians in the field near the student's home who know the library school's objectives). This new student would also be interviewed by faculty and students currently enrolled in the school. These interviews would be designed to determine the candidate's capacity for independent thinking, intelligence, and potential competence as a professional librarian.

### 62 Initial Orientation

As for curriculum content and method of presentation, the transmission of basic facts, skills and techniques would be by means of an independent study programme. Faculty would be on call for special classes or meetings on certain topics but would not have regular classes as such covering these basic skills. Some faculty might run labora-

tories where exercises in basic skills could be performed or they might operate experimental libraries as part of their teaching/research load. This activity might require anywhere from one to three months of the student's time, depending on his rate of development and on a consensus of what we consider to be *the* basic skills or knowledge.

### 63 Research on Specific Library Problems

After this initial orientation and basic learning period, the student would be placed in direct contact with various research problems associated with library developments. Either formal courses or directed field work would be arranged for this portion of his education. The faculty would approach this phase of library education as colleagues rather than as teachers of the students. The students would help choose the subject matter and possible projects which would have relevance for their own purposes and development. Real problems in libraries could form the basis for projects; sometimes the work would be brought to the school's laboratory and at other times, the *students* and *faculty* would study and work at the library in the field. Any problem deemed manageable could be pursued with the guidance of the faculty and the librarians in charge. In this way, the necessary theories and principles, methods and advanced knowledge could

be introduced and assimilated. The students could play with the basic knowledge they acquired during the first phase of their library education. This type of educational experience would approximate the clinical and laboratory experience in many other graduate programmes such as the biosciences, social work, forestry, dentistry, etc. The faculty's research interests and the student's objectives in learning would be blended during this phase.

### 64 Assessment of Student Work and Evaluation of Programme

The evaluation of students and of such an innovative library science programme would take some careful rethinking of our present evaluation procedures. They say creativity of thought is facilitated when self-criticism and self-evaluation are basic. If the student has had a chance to select learning experiences considered relevant to him, then he will willingly choose direction, participate responsibly in the learning process and live with the consequences of his choices. The faculty must be prepared for him to evaluate his own exercises because this will be much more important than the evaluation of others. When the time eventually comes for the quality of his completed students and research and the other products of his learning to be certified, this evaluation could be done by the fac-

ulty and by representatives of librarianship as a whole.

65 IN DRTC

It is interesting that in the Documentation Research and Training Centre, the programme for education in documentation has already been implementing some of the ideas I have just mentioned. For instance, even though the Centre admits to the documentation course only either professionally qualified librarians or persons with a Master's Degree in a subject and at least two years' library experience, an initial two months orientation programme is gone through. This, I understand, helps the students who have come with varied educational background and library experiences, to accustom themselves to the habit of systematic thinking, deriving the theory and practice of library service from the Laws of Library Science, express ideas clearly using the appropriate technical terminology of the subject.

Close contact between student and teacher is emphasised in maintaining a student-teacher ratio conforming to the prescriptions of a sound theory of education, and by making the course a residential one.

The student's interest and abilities are stimulated by minimising the number of lectures and using

more of class discussions, tutorials, colloquia, seminars, and project work. The lectures are mainly for raising the curtain, as it were, to point to some areas of research in the field. That some of the students are able to turn out pieces of research in library science even while they are undergoing the course, is an indication of the effectiveness of the methods used.

It is also noteworthy that evaluation of student work and of the effectiveness of the programme is based on project work — individual and cooperative — in each of the subjects rather than on answering a two-hour or three-hour question paper.

## 7 The Challenge

### 71 Change of Programme Needed

Will faculty in library schools be willing to admit that a series of courses, no matter what their content, is not sufficient preparation for the responsibilities the student should assume upon graduating? It is difficult to see a working alternative if we are to implement in the United States the proposed A L A statement of the objective of the master's programmes in librarianship. The A L A statement says, "the objective . . . should be to prepare librarians capable of participating and engineering

the change and improvement required to move the profession constantly forward." Concentrating on the tasks and routines in today's libraries will not do this nor will a purely academic library education. We need to relate the library school student to the library profession's present problems and future needs.

### 72 Two Phases of Library Education

If knowledge in librarianship is to be seriously pursued, we must find the capacity to have sport with what we know. No longer can we assume that knowledge in librarianship is merely the accumulation of brick-upon-brick of content and information — that is something to be taught in a basic set of courses or learned on the job. Instead, we should look at library education as a two phase operation; first we will have to master certain skills and facts, and secondly we will have to approach some of the problems of librarianship as researchers and scholars. Library schools should be where this happens, where fledgling librarians sprout their wings under the guidance of experienced professionals.

### 73 Change of Attitude Called For

If this approach sounds interesting to you, there is a crucial question for students, library educators

and librarians alike: can we abandon some of the assumptions we now have about library education? Students quite often assume that courses and experiences in library school will be like their other classes; faculty expect to teach course by course and assume it is difficult to innovate; librarians would find it difficult to fit both library school faculty and students into their work-a-day world. Everyone will need to be re-oriented if we are to develop a programme whose graduates will be tomorrow's decision-makers in libraries. We will all have to work to find ways for the students to demonstrate that they are able to make original, significant contributions to professional practice.

### 74 Relate Library Education to Library Problems

Such a school, as I envision, would include direct experimental confrontation with research problems and other practical, ethical and philosophical problems. The students would relate their educational experiences to the real problems being faced today and those likely to come up in the near future. Before such a school could open its doors, several librarians would have to agree to have their libraries designated as "library education experimental stations"; library educators would have to accept their role as researchers and field workers;

and students would have to assume their role as colleagues working on more than studying library problems.

## 8 Library Education Experimental Project

### 81 A Personal Note

This past year, we tried to put part of this plan to work for such a library school at the Syracuse University. We established something called the LEEP Laboratory. Before I can begin to describe it, I would like to tell you some personal history to put it all into some context.

More than ten years stretch between my library school days as a student and my being a member of the faculty at Syracuse University School of Library Science. During much of that time, I was engaged in documentation research (later called information storage and retrieval systems) in the field of scientific information. Libraries and librarians were not the stars of the drama I witnessed during those years, although I thought we had a lot to contribute as well as a lot to learn from the whole endeavour. When I returned to library education and tried to relate some of the excitement I felt about the developments in information systems, I met the same looks and attitudes that you do when you show your slides of Europe to a group that has never been there. Gradually, I realised that what I

had witnessed could only come alive if the audience was given first-hand experiences; if, in other words, they were able to play with their knowledge and have sport with what they knew. The problem was: How to bring information storage and retrieval concepts into a traditional library school with no strong resources or faculty in special librarianship or computers.

### 82 Providing Real Experience of Automation

The United States Office of Education and the Library of Congress came to my rescue with financial and technical resources to help us transform some of the class discussion of library automation and information storage and retrieval systems. We created LEEP, the Library Education Experimental Project. It is a laboratory environment where the students and faculty have experience with a computer-based catalogue, developed from the MARC Pilot Project data from the Library of Congress. We have learned to use the MARC records in the computer as a library user now uses the cards in a card catalogue. Students and faculty began to evaluate the bibliographic control system within a library by contrasting it with this new tool. Some students are taking the initiative and are engaged in independent projects where they

work with a librarian in the field to study and suggest improvements in existing systems. The impact of MARC in libraries has been brought home to every student regardless of his orientation to school, public, academic, or special libraries because every student in the school experiences some use of MARC when he takes courses in cataloguing, reference service or bibliography. All of these courses have assignments of one kind or another which bring the student to the LEEP Laboratory.

## 83 A Cooperative Effort

LEEP had as consultants the two librarians in the Syracuse area most directly involved with advanced library automation projects — Ron Miller of the Five Associated University Libraries and Irwin Pizer of the Biomedical Communications Network. They advised us as we developed the LEEP Laboratory. Some of our students in turn contributed something to their research efforts. More than three hundred students at Syracuse during 1969-70 had at least a brush with the computer-based MARC catalogue. The students say they went away feeling less fearful about the "machine." Some of the faculty were glad that LEEP existed because they were able to demonstrate certain concepts and new developments instead of merely talking about them.

84 LEEP-BY-MAIL SERVICE

At an institute in the Adirondack Mountains in October 1969, faculty from twenty library schools came to see what we had done. At that time, we implemented a LEEP-by-Mail service. Now students in other library schools, where computing facilities and the MARC data base are not as accessible, can perform MARC searches in our LEEP laboratory and they too can put this knowledge to work, testing the potential of MARC, etc! As of this date, some fifty or more students in two library schools in New York and Philadelphia are using LEEP.

**9 Faith in Collective Effort**

I have great faith in the combined efforts of librarians, students and faculty in library schools today. Together we will find a way to insure that books are used and that this will be our first goal. The absolute essential for success will depend, of course, on our willingness to have sport with what we know. Librarianship is a practical world but it is on the edge of a new existence. If we look at ourselves in a playful way and use the knowledge we gain, we could make our education more relevant and our graduate librarians more professional. If we make an effort to establish a *quid pro quo* relationship between the field of library work and

library education, we can insure the implementation of the First Law of Library Science.

Philip H Rhinelander said, "Education ought to be ultimately not a matter of systems, nor of organisations, or of structures, or of theories, but of individuals who *encounter* one another, who respect one another, who can speak to one another, despite disagreements, and who can *listen*" (18). Such an opportunity as this is my education, my encounter, and my chance to listen as well as speak.

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